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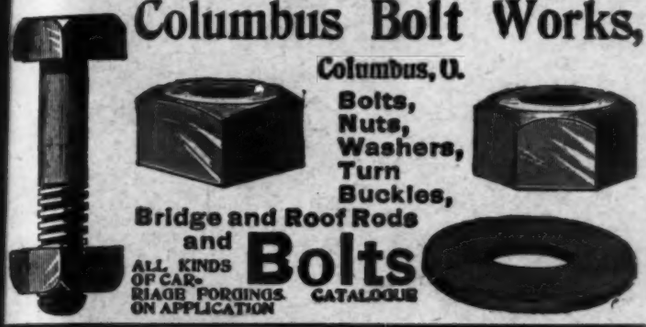
The American Artisan

THE HARDWARE RECORD

Volume 44—No. 4. CHICAGO, JULY 26, 1902. $2.00 Per Year.

Columbus Bolt Works,
Columbus, O.



Bolts,
Nuts,
Washers,
Turn Buckles,
Bridge and Roof Rods
and
Bolts
ALL KINDS OF CARRIAGE FORGINGS ON APPLICATION
CATALOGUE

PURE ASPHALT "SAMPSON" BRAND" ROOFING
Never Dries Out or Cracks. Planet Brand Tarred Ready Roofing, Slaters' Felt, Building Papers, Roofing Cements, Paints, Etc. WRITE US FOR PRICES.
J. L. PERKINS & CO., 235 Lake St., CHICAGO

Independent Stove Casters

Better Than a Truck

Fits Any Stove Without Adjustment.
Enables One Man to Move a Stove.
You Need This In Your Business.

Independent Register Co.,
158 Champlain Street,
Cleveland, Ohio.

ATLAS BOLT & SCREW CO.
CLEVELAND, O.

We make a full line of
Stove Bolts, Stove Rods,
Machine Screws,
Pointed Pins,
Threaded Wires,
Rivets, Special Bolts,
Mica Bolts,
Cold Pressed Nuts.

AMERICAN SEAL STOVE PUTTY
Odorless—Never Cracks—Never Crumbles—Never Falls out. Makes tight joints, and prevents the escape of gas or ashes.

ASBESTOS FURNACE CEMENT
Bakes hard as the iron itself—Strictly Fireproof—Perfect Non-conductor
Try a sample order of either of the above and be convinced of their superiority. If you are not satisfied return the goods at our expense. Put up in any size package from a pound can to an 800 pound barrel.
Insist on having AMERICAN SEAL. Every package bears above trade mark
Manufactured by
THE WM. CONNORS PAINT MFG. CO.
TROY, N
Western Agents: J. L. PERKINS & CO.,
235 LAKE ST., CHICAGO, ILL.
STOCKHOFF SUPPLY CO., ST. LOUIS, MO.

BRADLEY SHELF BRACKETS.
Strong, Light and All Right.
ATLAS MFG. CO., New Haven, Ct.

E. J. JOHNSON & CO.,
88 PARK ROW, NEW YORK,
Producers of
ROOFING SLATE
Slate Blackboards. Write for delivered prices.

Black Diamond Files and Rasps.
PERFECT—ALWAYS
Twelve Medals Awarded

At International Expositions.
G. & H. BARNETT CO.,
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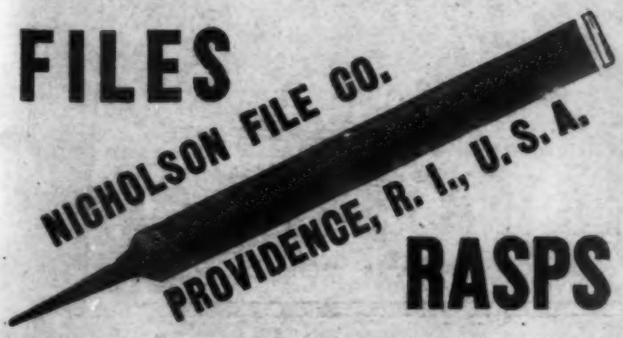

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THIS SPACE FOR SALE
ADDRESS
DANIEL STERN
69 Dearborn Street
CHICAGO

BOILERS AND RADIATORS

A Postal Card from you will bring valuable, complete information in regard to the best, most comprehensive, strictly modern line of these goods.

WRITE US TODAY.
New York, Boston, Philadelphia, St. Louis, Buffalo, Minneapolis, Denver, Detroit, London.

AMERICAN RADIATOR COMPANY
Lake and Dearborn Sts., CHICAGO.

"TABASCO" WATER HEATERS

All Steel, Self-Feed Shaking Grate

FOR
Small Residences, Green Houses, Flats, Hotels, Baptistries, Bath Houses, any place a supply of hot water is needed.

Send for Catalog.

KEWANEE BOILER COMPANY
KEWANEE, ILL.
CHICAGO STORE: 167-169 E. Lake St. CHICAGO.

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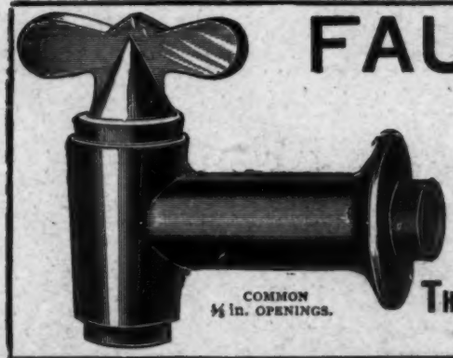
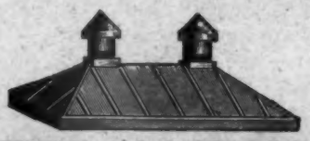


COMMON ½ in. OPENINGS.

Beer
Milk Can
Oil Can
Cream Separator,
of Various Sizes and Styles.
MF'D. BY
THE CLARK NOVELTY CO.
ROCHESTER, N. Y.



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METALLIC SKYLIGHTS

Are known in every State. Have stood the test for years. Are made in 10 styles and 500 sizes. Complete Skylight, Cornice and Finial Catalogue mailed free. We are prepared to furnish ribbed sky light glass at very reasonable prices.

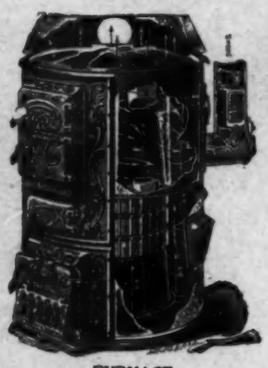
J. H. JONES, Mfr.,
Lock Box 33. STREATOR, ILL.

"Eagle" Brand Copper Rivets and Burrs.

STANDARD FOR QUALITY. (Lake Superior Copper.)
—MANUFACTURED BY—
THE PLUME & ATWOOD MFG. CO.,
29 Murray St., NEW YORK. 196 Lake St., CHICAGO, ILL.

OUR SALES ARE LARGER THAN EVER

Largest Variety.
Latest Improvements.



FURNACE

HEATING

Lowest Prices.
Most Reliable and Economical.

STEAM HEATER

APPARATUS

FURNACES, HOT WATER, STEAM AND COMBINATION HEATERS

A Postal Card will bring you full descriptive Catalogs, Price Lists and Discounts.

The BOYNTON FURNACE CO.
207-209 Water St., NEW YORK. 147-149 Lake St., CHICAGO

QUICK MEAL

HAVE AN EXTRA HEAVY STEEL BASE

HAVE EXTRA HEAVY OVEN PLATES

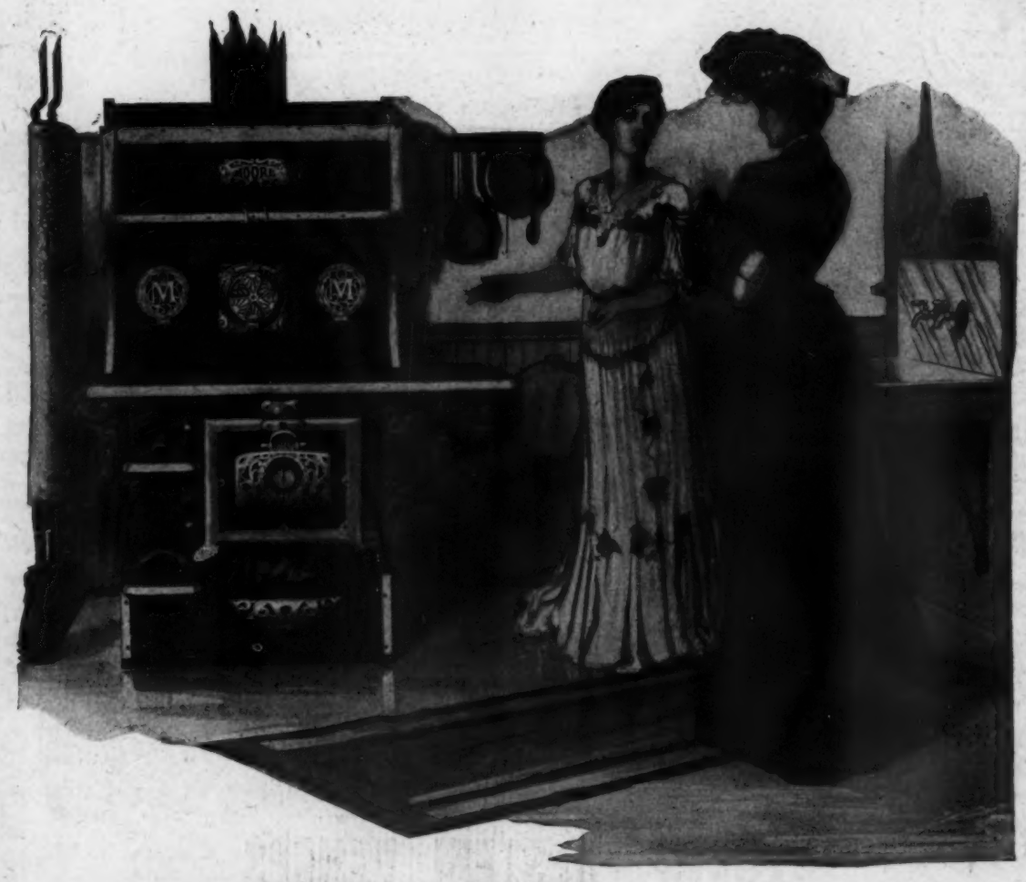
ENAMELED STEEL RANGES

Are made of extra heavy materials all through. The sheet steel used is of an extra heavy grade of cold rolled, leveled steel. The linings and covers are very heavy, and are made of the best grades of pig iron. Only high-grade workmen are employed in making the Enameled "Quick Meal" Steel Ranges, and they are as represented, a High Grade, High Finished, well made and well proportioned Steel Range, strictly first-class in every particular. Neat in appearance. neat in ornamentation. They will attract and please your customers.

The Best Dealer always sells "Quick Meal" Ranges.

RINGEN STOVE Co. SAINT LOUIS.

Moore's Stoves



THE PRIDE OF THE BRIDE—A new home completely furnished with every convenience is sure to have A MOORE'S STEEL RANGE in the kitchen. Not only the reputation of these ranges with previous users, but their neat attractiveness and handiness —which appeal to both the eye and the good sense of the buyer—insure this selection.

—The illustration is from a home recently furnished with Moore's Premium No. 268 Reservoir and Closet.

JOLIET STOVE WORKS, Joliet, Illinois,

HOLBROOK MERRILL & STETSON,

San Francisco, Sacramento, Los Angeles.

45

TRADE WINNERS

WHITE'S MAXIM STEEL RANGE

is beyond all question the most practical, most attractive and best selling range on the market. It has pouch feed for coal, end feed for wood or coal, with both front swing and side swing, duplex grate that can be removed through grate door, front poke door with slide damper, cast back flue, planished steel body, asbestos and steel lined, spring balanced oven door. Sheet iron shield below steel bottom to equalize heat in the oven; full cast reservoir attachment, with cast shield across back to prevent rust, and full nickel trimmings.

WHITE'S MODEL STEEL COOK

has been equipped with many improvements entirely original with us, and which must commend them to the favor of the trade.

The bodies are made of a superior quality of polished steel. Ovens are full size and the deep oven doors are spring balanced. Grate is combined revolving and dumping type. Walls are triple steel-lined, asbestos and steel. Asbestos on bottom is protected by outside shield. Bottom oven plate is securely braced. Asbestos-lined top oven plate is overlaid with open cast shield. Handsome cast base. Full nickel trimmings.

THOMAS WHITE STOVE CO.,

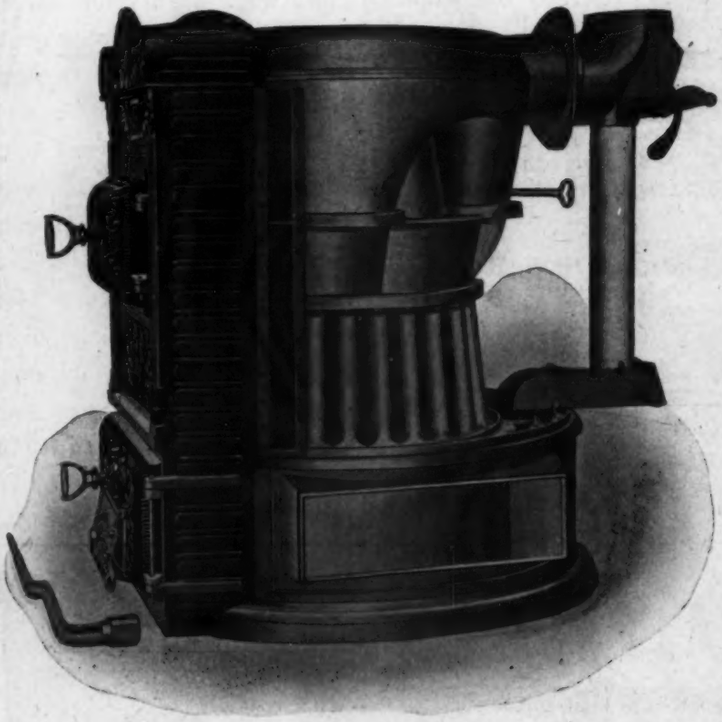
QUINCY, ILL.

TORRID SUNSHINE FURNACES

600 SERIES

A Specialty for Low Cellars.

The 600 Series of Torrid Sunshine Furnace will force heat where no other Furnace can.



Low Down
but not cramped

High Grade
but low cost

Ample Weight
but not clumsy

Successful Dealers Use Specialties and Win.

"Distinction is the Crown of Work."

The Torrid Sunshine line of furnaces is acknowledged excellent.

Send for furnace books and allow us to quote prices.

The Reading Stove Works, Orr, Painter & Co.,

Sunshine Stove Shops, READING, PA.

Western Branch, 153 S. Jefferson St., Chicago, John Kontny, Mgr.

PHILADELPHIA. BOSTON. BUFFALO.

Jewel Steel Ranges

MADE IN CHICAGO

for Coal and Wood

BY

George M. Clark & Company

BESIDES BEING

Newest and Best

ARE

Different

FROM ANY RANGES YOU'VE EVER SEEN OR SOLD

Write for Our Catalog.
Wait for Our Salesman.

ORDER SAMPLE

George M. Clark & Company

71 LAKE STREET, CHICAGO

QUEEN HOT BLAST

JUST OUT

Made in the highest grade; well fitted and finished, and made of the heaviest and best materials. They have large ash pit provided with large ash pan; ash pit door fitted with our patented air-tight register; draw center, anti-clinker grate; handsome urn, nickel plating and pressed steel nickel rings. It is the best stove of its class made and the price is right.

WRITE FOR CATALOGUE

PORTSMOUTH STOVE & RANGE CO. PORTSMOUTH, OHIO

MORLEY BROS., Agents. SAGINAW, MICH.

Boomer Furnace.

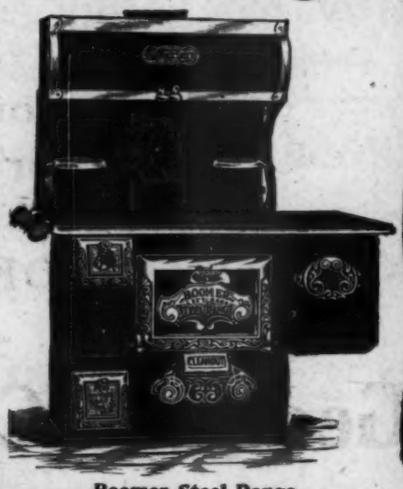
REGARDING

Boomer Furnaces OR Boomer Steel Ranges.

We want to state in strongest terms possible that if you want the

Heaviest,
Most Durable,
Most Economical

and easiest to take care of Furnace or Steel Range, buy a **Boomer.**

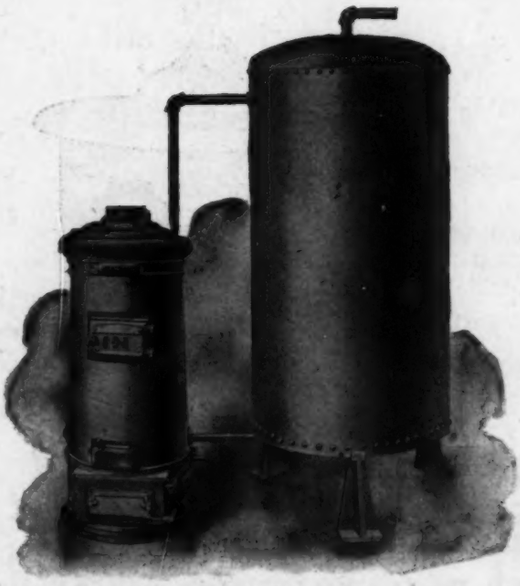


Boomer Steel Range.

Neither time nor money is spared to make them the Best. Buy Boomers and save your coal bills. We invite investigation.

THE HESS-SNYDER CO.,
Manufacturers, MASSILLON, O.

Our New Ideal Premier Tank Heater



IDEAL PREMIER TANK HEATER

is now ready for the market, and we invite your critical examination of its various features of construction.

Send for 1902 profusely illustrated Catalog.

AMERICAN RADIATOR COMPANY

Lake and Dearborn Streets
CHICAGO

NEW YORK PHILADELPHIA BUFFALO
ST. LOUIS MINNEAPOLIS DENVER

The Kelsey Warm Air Generator

A Heating Apparatus with from nine to seventeen vertical corrugated cast-iron flues or sections forming the fire cylinder and combustion chamber, and having 65 square feet of heating surfaces to each square foot of grate surface.

Warms thoroughly and to proper temperature, great volumes of air by passing it through the flues and conveys it to every part of the building.

Provides heat and most perfect ventilation for Residences, Churches and School Buildings.

Accomplishes results which lead to further sales at satisfactory profits for the dealer.

New York Office

156 Fifth Avenue

L. V. SANFORD, Manager

COOK & VAN EVERA CO.

38 E. Lake St.
CHICAGO
WESTERN SELLING AGENTS

SEND FOR 164-PAGE BOOK OF OPINIONS.
20,000 IN USE.

KELSEY HEATING CO.

....MAKERS....

SYRACUSE, N. Y.

FOREST CINDERELLA

An Air-Tight Stove for Wood

Cast Top—Cast Bottom—Cast Linings.

Top and End Feed. Reversible Pipe Collar.

Graceful Outlines. Neat Decorations.

Screw Drafts. Machine Fitted Door.

Body made of Oak Stove Steel. No rods.

BESIDE: It has two features which competition can neither beg, borrow nor steal, viz.:

A Record and a Reputation

ITS RECORD: 3 years old, and never once relined.

ITS REPUTATION: The most durable Air Tight made, yet medium priced.

"MADE IN PITTSBURGH," PA.,

BY

PITTSBURGH STOVE & RANGE CO.

WESTERN SALES AGENT, W. D. SAGER, 38 TO 40 MICHIGAN STREET, CHICAGO, ILLINOIS.

GILT EDGE WARM AIR FURNACES

AND COMBINATION HEATERS

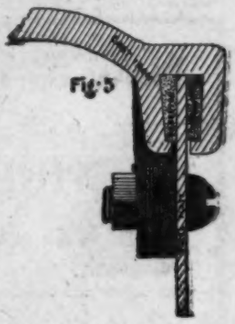
have merits which are all their own. Every furnace is correctly made and the price is right. Kindly write us for Catalogue.

R. J. Schwab & Sons Co.

MILWAUKEE, WIS.

THE KEYSTONE JOINT

used on Gilt Edge Furnaces is the only permanent gas-tight steel and cast iron joint on the market.



BRAND STOVE CO.

We make largest line of cooking and heating apparatus, cast cooks, cast ranges, steel cooks, steel ranges, hotel outfits, heating stoves, furnaces, hot water and steam heaters. Send for catalogs.

MILWAUKEE, WIS.

PAGINATION INCORRECT

Queer Quiet Quito

That indolent Ecuadorian city on the Equator has all the heat and all the light its non-working inhabitants need. In this country there is an enormous demand in every community for heat and light and profit in supplying that want.

The Combination Gas Machine and Mixing Regulator.

gives better service than that of the gas companies at one-quarter the expense. The trade should send us names of householders.

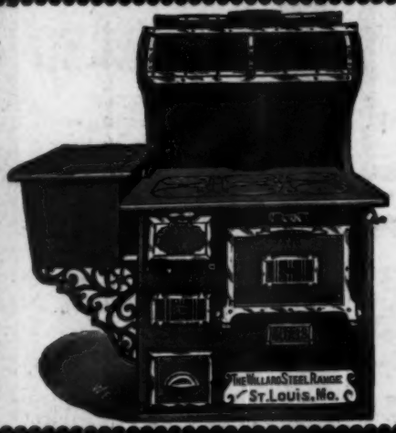
Our literature will do the rest.

The Bolton Hot Water Heater

is the most efficient, and economical hot water heater in the market. It is made right. It works right and the price is right.

It will pay you to investigate.

Detroit Heating & Lighting Co., Detroit, Mich.



There's Only One

steel range a dealer can handle on which he can make an argument both as regards PRICE and QUALITY that is the

WILLARD STEEL RANGE

This range sells on its merits at a price that places it within the reach of all.

Wm. G. Willard, Mfr.

619-621 N. Fourth St., ST. LOUIS, MO.

BUY THE **BLACK KID STOVE POLISH**

AND DON'T PAY FOR IT IF NOT THE BEST YOU EVER USED

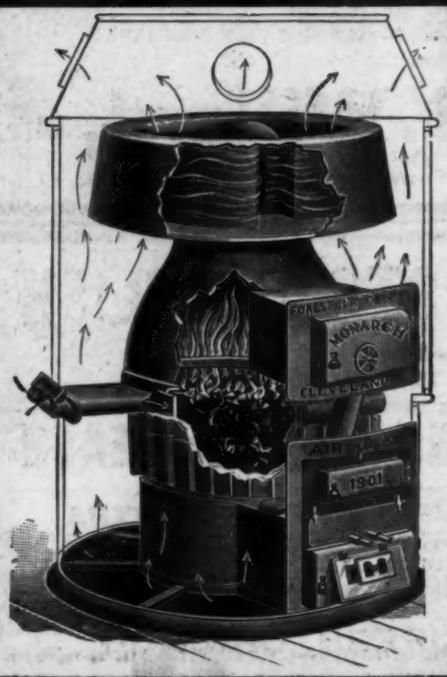
FIVE POUND CANS—65 Cents EACH

TRY IT IF YOU WANT SOMETHING EXTRA FINE FOR YOUR SAMPLE STOVES

BLACK KID NICKEL PLATE STOVE POLISH CO. MANUFACTURERS, CHICAGO

HOME COMFORTERS FOR

"NEW PROCESS" AND "STANDARD" OIL HEATERS.
MADE BY THE STANDARD LIGHTING CO.
CLEVELAND OHIO.
Sold by Jobbers and Dealers Everywhere.



Monarch Furnaces

are built on honor and the retail furnace trade will find them a different article from those furnaces whose castings and fittings are obtained from jobbing foundries at the cheapest figure obtainable.

We furnish with each furnace regulator plate with chains, pulleys, etc., a heavy shaker, collars for smoke pipe and clean-out openings, lift-up check damper for smoke pipe, cement for all joints, and water pan when especially ordered.

Send for Catalogue.

The Forest City Fdy. and Mfg. Co.,
Cleveland, - Ohio

Sales of

STEEL RANGES

will depend on the fuel-saving qualities of the range you handle.

CHAMPION AND MARQUART STEEL RANGES

have gained an enviable reputation through their great economy of fuel, due to their double flue construction. Write us. We will tell you about them.

CHAMPION STEEL RANGE CO.
CLEVELAND, O.

CHAS. F. MALONE,
ROLFE, IA.,
WRITES:

"If I went to South Africa I would want The American Artisan sent to me."

DO NOT BUY

MUELLER

FURNACES and BOILERS

UNLESS

YOU WANT THE BEST ARTICLE ON THE MARKET.

HEATERS IN ALL STYLES—FOR ALL KINDS OF FUEL.

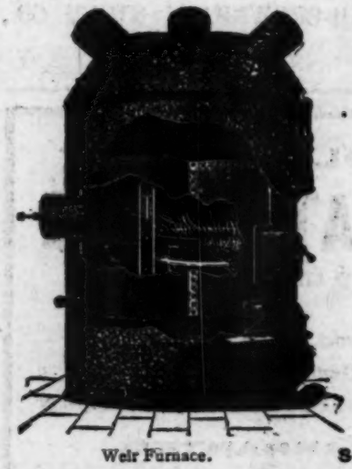
Write for CATALOGUE and PRICES.

EVERYTHING IN THE HEATING LINE.

ESTABLISHED 1857.

L. J. MUELLER FURNACE CO.

191 REED STREET MILWAUKEE, WIS.



Weir Furnace.

Weir ALL STEEL GAS AND SOOT CONSUMING Furnace.

The Heaviest Steel Furnace Made.

Absolutely gas and dust tight.
A great heat producer, but a fuel saver.

MADE IN TWELVE SIZES.

"The Handy Furnace Pipe"

The saving of labor in putting it up really makes it the cheapest hot air pipe on the market.

Manufactured by

Meyer Furnace Co.

Send for Catalogue. PEORIA, ILL.

Is Absolutely Safe.

Handy Pipe.

Emperor Furnaces

For Wood

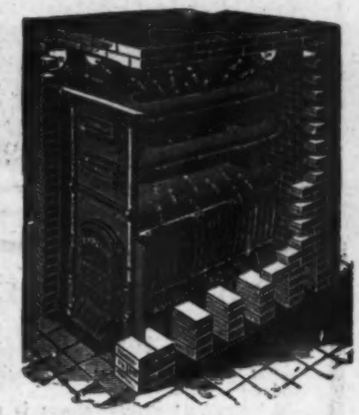
Simple. Safe. Durable.

The Best and Cheapest Line of Wood Furnaces.

Furnished for Either Brick or Galvanized Iron Casing. Send for Catalogue.

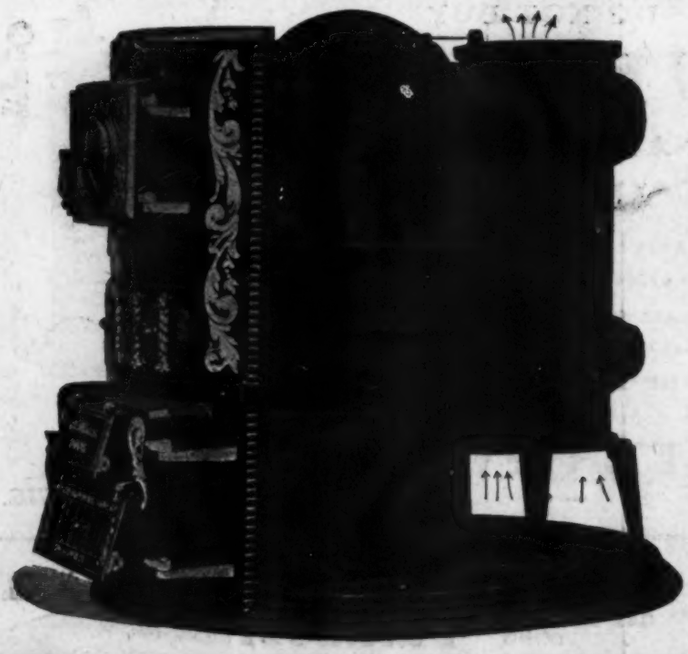
Bergstrom Bros. Co.

Neenah, Wis.



E. D. Strong
Dryden, Mich.
writes:

At present I am not in the Hardware business, but feel that I cannot afford to be without THE AMERICAN ARTISAN. It is a most valuable paper.



SEVERE USAGE

is the lot of most furnaces, and only a furnace that is made extra heavy throughout will stand it.

The Crown Furnace

Low Down Type—Made in 4 Sizes

is such a furnace. It also has an extra large amount of radiation for the size of the firepot used. This furnace can be cleaned with the greatest facility.

SEND FOR CATALOGUE.

MARCH-BROWNBACK STOVE CO.,
POTTSTOWN, PA.

THE COLUMBUS

STEEL PLATE RANGE

ANY KIND OF FUEL!

Made of Heavy Polished Steel
A Modern High-Grade Range
A Range that Sells and STAYS SOLD

FULLY WARRANTED

The COLUMBUS STOVE CO.

COLUMBUS, O., U. S. A.

The Lowest Priced High-Grade Range on the Market

CLARK'S CELEBRATED UNDER-FEED FURNACE.

Is the best heater on the market for burning the cheaper grades of slack and nut coal.

Every part of this furnace is made with great care, and is very strong and durable.

The feeding device is hung oscillating.

The radiator is on the top.

The entire furnace is cast iron.

It has but three joints.

It is a comparatively smokeless furnace.

The grate does not shake but revolves.

WRITE FOR CATALOGUE

W. A. CLARK & CO.

35 PIKE STREET :: :: :: COVINGTON, KY.

That Furnace

which will most successfully burn the most available fuel in the particular locality where you are located is the one which will have the largest sale.

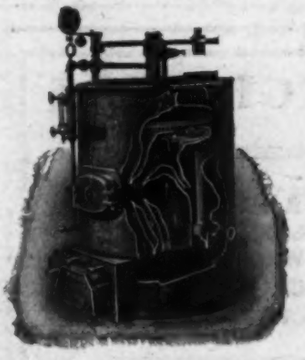
THE FLORAL CITY

line embraces furnaces which are made specially for different fuels and is sure to furnish a selection suitable for any locality.

MONROE FOUNDRY & FURNACE CO.
MONROE, MICH.

"Money Saved is Money Made."

When THE DUNNING HEATING BOILER *Steam or Water, is used, you not only save* MONEY *in fuel, but also —*



Trouble, Expense and Discontent.

"Procrastination is a Thief."

WRITE NOW.

NEW YORK CENTRAL IRON WORKS CO.
Geneva, N. Y., U. S. A.
BRANCHES:—St. Paul, Robinson & Cary Co.
Ft. Dodge, Leighton Bros.

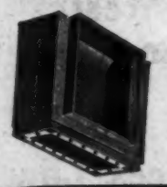
Established 1874.

The largest and most reliable Foundry Supply House in the world.

THE
S. Obermayer Co.,
CINCINNATI, OHIO,
CHICAGO, ILL.
manufacturers
"Everything You Need in Your Foundry."
Importers and refiners
PLUMBAGO GRAPHITE.
Catalog Sent on Application.

Geo. W. Brown, Jr., Hillsboro, Ill., writes: "You may kindly discontinue our WANTED TINNER adv. that you have so kindly carried for us the past three issues. I have received replies from Vermont to Dakota, and think that we have secured a good man."

MICHIGAN SAFETY FURNACE PIPE



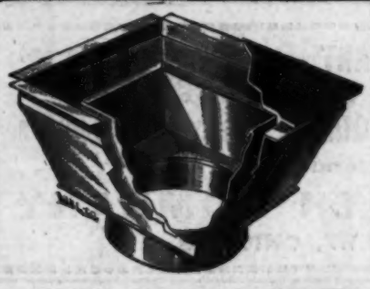
THE STIFFEST AND BEST FINISHED MACHINE-MADE PIPE ON THE MARKET

WE ARE NOT IN THE PIPE COMBINATION

We Have Something Entirely New in the Line of Round Pipe and which is Superior to anything ever made.

Send for Catalogue and Discounts.

The Michigan Safety Furnace Pipe Co. 39-41 E. Atwater St. DETROIT



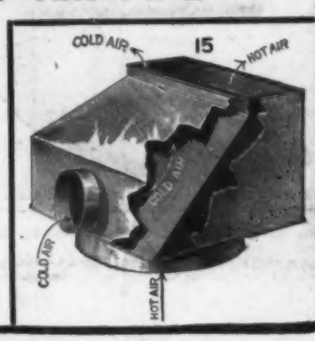
ONE FACT outweighs a thousand claims. IT IS A FACT we manufacture

THE BEST HOT AIR PIPE

on the market and ANOTHER that our prices are as low as any competing line.

IT IS A FACT we have many imitators, which is sure proof of the value of our pipes.

WE HAVE MORE FACTS in our Descriptive Catalogue, and will be glad to mail you one. Address,



SAFETY FURNACE PIPE COMPANY
11 E. Atwater Street, - - - DETROIT, MICH.

If you could buy another heater for half as much—

You'd still save money by buying a

RICHMOND

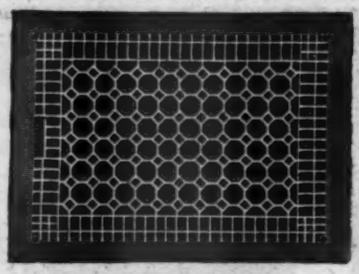
Steam or Hot Water **HEATER**

Catalogue explains how durably constructed and how economical of fuel they are—send for it.

THE RICHMOND CO., Inc. Norwich, Conn.

WESTERN BRANCHES:

Chicago Heater & Supply Co., Chicago. Rumsey & Sikemeier, St. Louis.



WE MAKE RIGHT PRICES AND PROMPT SHIPMENTS

All Sizes—All Styles of Finish

Quality and Finish Unexcelled

HENRY & SCHEIBLE CO.

6-8-10 Long Street
CLEVELAND, O.

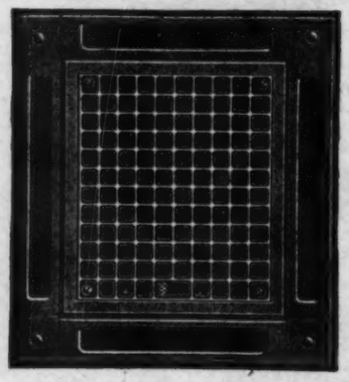
C. M. DOXSEE,

ALGONA, IA., Writes:

"Please drop my ad. for a tinner, I have secured the services of a good man, and have not time to answer all the applications."

H. & C. WROUGHT STEEL REGISTERS

STRONG, LIGHT, HANDSOME IN SIMPLICITY OF DESIGN



FURNISHED WITH WROUGHT STEEL or WROUGHT BRASS FACE PLATES AND IN ALL FINISHES

General Sales Agents

Stanley Works

New Britain, Connecticut
79 Chambers St., New York
19 Lake St., Chicago

Manufactured by

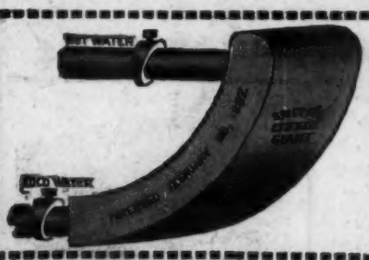
THE HART & COOLEY CO.

New Britain, Connecticut.

FERROSTEEL REGISTERS

Ferrosteel Co., Cleveland, O.

Largest Stock in the West
Always Uniform
No Delays
Terms Long
Prices Low



SMITH'S LITTLE GIANT
CIRCULAR GIANT
MALTESE GIANT

Can be used in any furnace and will heat your cold rooms.

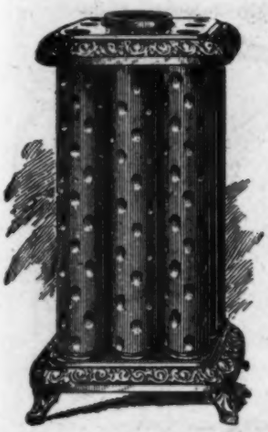
THEY HAVE NO JOINTS

...Send for Catalogue...

CHARLES SMITH COMPANY

122 LAKE STREET, CHICAGO

JOHN PORTER, ALTOONA, PA., Writes: "I can't run my shop without THE AMERICAN ARTISAN."



EVERY PRACTICAL STOVE DEALER

knows that heat without circulation is valueless. The best circulator gives the best heat.

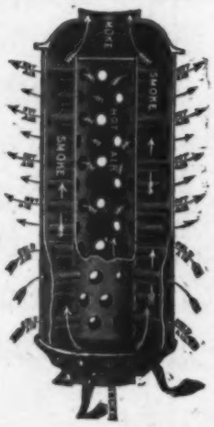
New Era Radiators have *perpendicular* tubes. They take the cool air in at the bottom and rapidly heat it in the natural way *as it ascends.* Their construction tends to increase circulation instead of retard it as tubes in any other direction would. All the products of combustion are compelled to touch the outer or inner surface of the tubes and the maximum amount of heat is radiated and circulated throughout the room.

If you would sell the best Radiator, you must buy the best—"New Eras" are the best in material, best in workmanship, best in appearance, and best in results. Made in three styles and many sizes. Prices are right, affording a large margin. Don't buy something cheap on which you make but little. People are willing to pay a fair price for a good article.

Send for our inducements and be prepared to talk New Era Radiators at the right time. **WILMOT CASTLE & CO., 77 Elm St., Rochester, N. Y.**

I can hold my hand over my chimney. No waste heat. I use a Rochester Radiator and save half the fuel.

The greatest leak in household economy is the loss of heat up the chimney. This was supposed to be unavoidable until the **Rochester Radiator** was invented; now it is cheaply and thoroughly controlled by the many cross tubes. Dealers find an ever growing trade. Why not put in a stock and get up a boom in your town?



4,866 sq. ins.

Rochester Radiator Co.

100 Furnace Street, ROCHESTER, N. Y.

MERCURY SEAL

AS APPLIED INDIVIDUALLY
TO EACH RADIATOR
WITH THE

JAS. A. TRANE VACUUM SYSTEM OF HEATING

MOST ECONOMICAL
HEATING SYSTEM IN EXISTENCE

JAS. A. TRANE VACUUM HEATING COMPANY

40 Dearborn St., CHICAGO, ILL.

TEL. CENTRAL 3847.

W. ROWE,

LAURIUM, MICH.,

WRITES:

"Will you kindly take my advertisement out, as I secured a job. THE AMERICAN ARTISAN is all right and I could not do without it, and no other tinner can do without it if they want to keep posted in the trade. You use this if you want to. Many thanks for the space you gave me in the paper."

THE NEILL STOVE MFG. COMPANY,

PORTSMOUTH, OHIO.

Make the Best Line of COAL and WOOD COOKING and HEATING Stoves to Sell. Send for Catalogue and Prices. See our 1902 New Oak and Arlington Steel Range.

ROUND OAK
STANDARD OF AMERICA

A good many
good merchants
are all at sea
when it comes
to selling a furnace
of quality
Eliminate price
from the deal
and they think
it is all off

Price should be
the very last thing
that enters into
a furnace trade
The struggle should be
to see how good
the job could be
installed, but first
you must have
the furnace of quality
and we make it

Doe-Wah-Jack first notices the (Round) Oak

Estate of P. D. BECKWITH
DOWAGIAC, MICH.
Makers of Good Goods Only

ESTABLISHED 1880.

THE AMERICAN ARTISAN & HARDWARE RECORD

Representative of the Stove, Tin, Hardware, Heating and Ventilating Interests.

PUBLISHED EVERY SATURDAY.

Terms of Subscription in the United States, their Possessions, and Canada, (invariably in advance): One Year, Postage Paid, $2.00.
In Foreign Countries, Except Canada, One Year, Postage Paid, $4.00.

Address all Letters, communications and remittances to

DANIEL STERN, Publisher and Proprietor,
69 DEARBORN STREET, CHICAGO, ILL.

Entered at the Chicago Post Office as Second Class Matter.

This Paper is a Member of the Chicago Trade Press Association.

CHICAGO, JULY 26, 1902.

THE noncontiguous territory of the United States now furnishes a market for $50,000,000 worth of the products of our people.

JULY returns from American Agriculturist's correspondents show that the winter wheat crop goes to harvest with the promise of June 1 fully maintained. The general average of condition is reported by that authority at 83.3, against 91.4 one year ago, and an average of 80.3 for the past nine years. Taking the present condition on the acreage reported June 1, it seems reasonable to believe that 425,000,000 bushels will prove a minimum measure of this year's winter wheat crop. The condition of spring wheat is reported lower than on June 1, being placed at 92.2, against 94.9 last month and 96.2 a year ago. The present breadth of corn is the largest on record; the acreage this year is estimated at 97,116,000 acres. Present returns show an increased acreage in every state and fairly uniform. The present condition of the crop is reported at 92.1, or about the average for a series of years, and compared with 85.4 one year ago. Deep root growth and an abundance of subsoil moisture now present will enable the corn to withstand any ordinary period of drought. On the other hand, the soil has been too wet to admit of proper cultivation, and the growth of weeds has been rapid. These statistics should prove encouraging to those manufacturers and dealers who have taken a despondent view of business on account of the wealth of water provided by the weather man.

VICTOR C. Alderson, Dean of the Armour Institue of Technology, Chicago, in a paper read before the Western Society of Engineers, dwells with the economic need of technical education. Among other things he says:

"The day of the untrained man is past; the day of the technically trained man is here. At no time have the untrained, the unfit, the poorly prepared been so ruthlessly weeded out of the professions, the arts, the trades and business callings as they are to-day. The incessant demand, heard by him who has 'his ear on the ground,' is for young men in the vigor of manhood, whose eyes, ears and hands, as well as minds, are trained to do the work demanded in modern industrial pursuits. Those who stand midway between the active industrial workers on the one hand and the administrative officers and professors of our technical schools, are able to take a broader and more comprehensive view of the field of supply and demand than most others.

"With advancing civilization, with the luxuries of yesterday becoming conveniences to-day and necessities to-morrow; with our products going to faraway lands in competition with local goods, with competition becoming sharper day by day, with the margin of profit becoming steadily narrower, it is found necessary to seek new lines of economy. In the accurate application of the laws of science, an almost limitless field is open. Mere practice, no matter how long continued, can not long avail against theory followed by intelligent application. A stupid fireman can burn up the profits of his establishment by ignorant firing; an engineman was recently discovered running an engine for no other purpose than to get exhaust steam to heat his building. He was a 'practical man of long experience.' A soap manufacturer who had depended upon the 'knack' of one workman for many years, nearly went into bankruptcy when the man died, for no one else seemed to have the requisite 'knack'; but the employment of a trained chemist without the 'knack' regained for him his lost business. A large railroad company recently saved more than half a million dollars in six months by equipping a laboratory in connection with its machine shops and putting in charge a technically trained man —one who could unite theory with common sense. Day by day the demands for scientific and technical training become more and more emphatic. The present age has truly been called the age of science, but with this designation the story is only half told. Pure science to be of the great value must be applied. The application of science to industry has made this the age of technical education; it has changed many of the conditions of life and has given rise to new problems, the solution of which depends in a high degree upon men who have received a technical education."

THE phenomenal development of the iron and steel industry of the United States led the British Iron Trade Association to appoint a commission last year to inquire into the industrial conditions and competition of the United States. The report of that commission is reviewed by the *London Commercial Intelligence* as follows:

"It is, indeed, a marvellous, and, to the British manufacturer and trader, in some respects a most discouraging story. The British Iron Trade Commission gives details of the mineral resources of the United States as affecting that fundamental industry—the manufacture of iron and steel; shows the extraordinary richness of the principal fields of coal, iron ore, and kindred minerals and demonstrates by concrete ex-

amples, how the natural inventiveness of the American has enabled him to apply to the operations of production and distribution a wealth of original ideas and methods that are as yet little known in Europe. It is also made manifest how on land, on lake, on river, and on canal, the American people have applied their minds to the solution of the conditions and problems of cheap transport until they have at last attained a level of rates and charges such as we have hardly had any experience of on this side of the Atlantic. It is not, however, to be supposed that the triumphs of the American people in these matters have been achieved without effort. Much testimony is borne to the fact that in the conditions of organization and administration, in their dealings with labor, in the confidence and enterprise with which they have embarked on industrial operations of great magnitude, in the efforts made to adapt themselves to new conditions, in the eagerness with which they have endeavored to create new demands both at home and abroad, and in the care and attention given to the successful cultivation of foreign markets, the American people have labored strenuously for many years, until labor, ingenuity and enterprise have become their most distinguishing characteristics. When one has appreciated all that the Americans have done for themselves, it is neither natural nor reasonable to grudge them the success which has attended their labors."

RANDOM SKETCHES.

BY SIDNEY ARNOLD.

W. S. Windham of the Pasadena Hardware Co., Pasadena, Cal., has left for his vacation, which he will spend in Ventura county, that state. The Pasadena, Cal., Star serves notice on Mr. Windham that it will refuse to believe any tales he tells of hunting big bears unless "the hide goes with the tale."

* * *

When Lord Clive was before an investigating committee of the House of Commons, who were querying him as to his conduct in the treasure chamber of Surajah Dowlah, directly after the battle of Plassey, that intrepid warrior drew a stirring picture of his position; the lives and treasure of all India lay at his feet; his mere caprice was adamantine law; the whole machinery of government; the *personnel* of rulers; the raising of crops; the carrying on of commerce; depended on the wave of his powerful hand. He haughtily confessed that he had helped himself to some wealth, but added "I am astonished at my own moderation." The same feeling that came over the great English general in narrating the situation in which the valor of his army placed him evidently came over our friend, John W. Baker, as he sat inditing his latest epistle in behalf of a stove trust. While looking over the figures he had prepared showing what inducements he was offering the stove world, this promoter became hypnotized by his own eloquence. He, like Clive, became astonished at observing his own moderation in the matter and in offering the stove fraternity so much as he did and thus expressed himself: "There should be no hesitation on the part of anyone who favors consolidation in accepting these terms, as no reasonable man could expect anything better. In fact, they hardly ought to expect terms as good."

No wonder Mr. Baker's breast fairly seethed with indignation as he read over his glowing offer and thought of the recalcitrant stove manufacturers who had dilly-dallied three long years without accepting same.

Then as the promoter's eye glanced on his handiwork a thrill of pleasure at the beauty of his creation flashed across his mind. What are rebuffs and lack of financial returns to the true artists? And cannot the promoter with visions of a symmetrical consolidation with handsome rake-offs be considered an artist as truly as the worker on the piano or the palette? Behold this paean of eulogy on the proposition offered the stove world wrung from its creator in the enthusiasm of retrospection?

"As you are aware this proposition was the result of three years' constant labor on our part and we feel that the proposition submitted, together with the plan of organization, have fully rewarded us for our time, labor and expense, for no better proposition has ever been submitted to any manufacturers, and we are gratified that we are able to present so satisfactory a proposition to you for your consideration."

The mother watching her three-year-old complacently making mud pies has ecstasies of maternal love and rejoices in his beauties of mind and body which she and she alone is cognizant of as a general thing, but such pleasure is trite beside the mental fervor of the writer of prospectuses gazing complacently on the offspring of his genius. What further reward than the privilege of perusing parchments pregnant with Promethean pyrotechnics saturated with soul-satisfying statistics and bristling with breezy bathos could the heart of the true artist desire?

Especially where the article in point is the writer's own composition untarnished by the vulgar hand of collaborator and undefiled by frivolous amendments from the common herd.

What the future may bring forth who can tell? Macaulay's historic New Zealander may wander amid the ruins of London. Then again he may not. But one fact cannot be gainsaid and that is that the antiquarian of the twenty-third century who delves into the ruins of some of our present stove foundries stands an excellent chance of striking a literature as liquid as the Persian, as stately as the Assyrian and symmetrical as the Sanskrit.

Learned pundits preparing annotated editions of these unearthed gems for use in the public school of that period will wrangle with each other fiercely over the genuineness of the documents. "How" one school will say "could the stove makers of that age turn down such propositions as these? It is a sheer impossibility?"

The other school holding that the documents are genuine will attempt to prove that the fraternity of the first years of the twentieth century were a savage race with stunted shapes, without imagination and possessing none but the crudest instincts and hence incapable of grasping the symmetrical beauties of Bakerian propaganda.

But returning from the clouds the question arises:

How is it that stove men have been able to exist for three whole years without the protective aegis of consolidation wrapped around them?

* * *

ONCE upon a time in an obscure corner of the Andes mountains there lived a merchant who made a living by the sale of llama hides. Now this merchant, although he lived away from the great arteries of trade, had an inquiring mind and when he noted in the Buenos Ayres papers the advertisements of stores that sold condor's eggs and conch shells and fresh pampas grass and canned peccary and armadillo legs and llama hides at prices that were lower than he could make, he wrote a little letter to a firm of llama hide manufacturers whose special brand was quoted and asked them about the howness of the wherefore and the thusness of the which and they sent him back a nice letter in which they said: "We sell the Hair and the Coston Store and Beers, Doughbuck & Co. and we would be glad to sell you too." Now this sweet, inoffensive letter, strange to say, did not please the dealer in llama hides who dwelt in the crannies of the Andes. He, however, did not stamp on the letter in his wrath and consign it to the raging torrents that swept past his door, but with rare tenderness placed it in a crevice where it was safe from the inclemency of the elements.

And lo! in the course of time there was a gathering of dealers in llama hides, lo many hundreds, and then the dealer of the inquiring mind arose and read this letter to the assembled merchants, some of whom came from the Andes mountains and some from Buenos Ayres on a special train with refreshments served by manufacturers. And the llama hide dealers listened to the letter attentively and yet they said nothing—but they heard it just the same.

And it so happened that five months passed and the time arrived when the llama hide dealers of Buenos Ayres sought the tall pampas grass, they and their wives and their offspring and the various manufacturers of llama hides provided condor's eggs and conch shells and boa constrictor skins and other objects for the llama hide dealers to strive for in various games of chance and skill and the firm of manufacturers who had told the dealer with the inquiring mind who dwelt in the center of the Andes that they would be glad to sell him also did present a shiny gourd for holding cooked manioc root to be given to the wife of the llama hide dealer who could overturn the most sticks of wood according to certain specified rules and regulations.

But some of these Buenos Ayres dealers had good memories and the letter that the man of the inquiring mind hid in a crevice in the crevasses of the Andes occured to them and they returned to the offending friend llama hide manufacturers their shiny gourd for holding cooked manioc root and announced their unwillingness to receive anything at their hands.

Is there any moral to this weird tale of mine? Yes, there is, and that is that the contents of a "decanter" will keep for five months anyhow, if not longer.

* * *

A COMPANY has been formed to extract rubber from oil. By and by we will get our wool from coal and our tenderloin steaks from prepared seaweed.

* * *

THE Dawson (Tex.) correspondent of the Waco (Tex.) Times-Herald says: "Our two hardware firms have consolidated and are known as Wood & Box."

It seems to me that this would be a more fitting name for a woodenware than for a hardware firm.

* * *

IT IS said that an international conference on the subject of wireless telegraphy must shortly be held.

The status of an ocean cable is dependent, outside of the physical conditions which govern its installation and its permanence, upon the attitudes of the governments in whose territory its ends lie, while the cable itself is particularly susceptible to injury and to destruction in the event of war or by hostile interference of any variety. The United States during the recent Spanish war taught several lessons concerning cable cutting and the facility with which these organs of communication may be destroyed or incapacitated temporarily or permanently. Evidently a system of wireless communication cannot be interrupted in this way, although the systems now in vogue appear to be equally vulnerable in other directions. It will be recalled that at the last international yacht races the reports sent in were confused and at times absolutely suppressed by the operations of a rival system in the same neighborhood. To-day it is claimed by several inventors whose names are given to systems of wireless telegraphy that a more or less perfect method of tuning or selective signalling has been developed, although up till now the details have not been made public. Until this is done it does not seem unwise to look somewhat askance at the claims so often made and so loudly reiterated without the kind of demonstration that appeals to the engineering fraternity. An additional complication is introduced into the subject by the attitude of the German government, which has apparently restricted its territory to the operations of one particular variety of wireless telegraph apparatus to the exclusion of others. Whether or not these systems will intercommunicate under ordinary circumstances is not known to the public, since no data have been given out by the various parties in interest. It is certain, though, that commercial communication cannot be secured without some form of international sanction.

* * *

THE Wellsville, Ohio, Common Council are evidently willing to go back quite a time to look for trouble, as they have raked up the Cope Hardware Co. of that city because their building, which they erected in 1859, was not built in accordance with the grade of the alley.

* * *

WALTY & Carson, Colchester, Ill., hardware dealers, are offering a steel range and trimmings worth $50 to the couple who will be married on the platform in front of their place of business on miners' picnic day, Tuesday, August 12.

News Siftings.

The Wyandotte Stove Co. are a new Topeka (Kan.) concern capitalized at $20,000.

The Pioneer Stove Co., Columbus, Ohio, are erecting a new foundry 75x200 feet in dimensions.

W. P. Fanning, Oakland, Ill., advises us that that city contemplates putting in a system of water works at once.

W. F. Nichols, W. E. Mathews and L. R. Koretz are the incorporators of the Nonpareil Gas Stove Co., Chicago, incorporated with a capital stock of $2,500.

G. S. Jones is president and J. C. Wood is treasurer of the United States Asbestos Co., Portland, Me., incorporated with a capital stock of $500,000, to mine and deal in asbestos in all its forms.

Edward C. Beers, an Auburn, N. Y., dealer in stove repairs, has filed a petition in bankruptcy. His liabilities are $1,468.66 and his assets are $1,385.23.

It is said that a large body of mica has been discovered at Ft. Collins, Colo., by W. W. Wirt of that city.

The Simpson Stove & Mfg. Co., Pittsburg, Pa., send us a pretty circular calling attention to the profits to be made in handling the Simpson gas ranges, ovens and cookers.

Van Leyen & Hensler, designers, engravers and electrotypers, have removed to Nos. 2-10 East Larned St., Detroit, Mich. This firm have a national reputation for the high-class cuts they make for advertising and catalogue work.

The United States Steel Corporation will erect a $10,000,000 tube plant at McKeesport, Pa. President Schwab said that the mill would be located at that point if the citizens raised $20,000 and $17,550 of this amount was raised in half an hour.

The Born Steel Range Co., Cleveland, Ohio, send us a little circular calling attention to the heavy asbestos interlining in the walls of the Born steel range which keeps back the heat, and consequently makes this an ideal hot water range, it is claimed.

The Matthews & Willard Mfg. Co., Waterbury, Conn., for whom E. A. Ireland, Auditorium Building, Chicago, is sales agent, make a very neat, strong and handsomely finished line of wrought steel stove rings. They also make a very artistic line of spun urns, stove trimmings, etc.

On July 16 The Wm. Resor & Co., Cincinnati, Ohio, manufacturers of the Monitor ranges, shipped a handsome double-oven gas range to the residence of Ex-Gov. Bushnell at Springfield, Ohio. This range had ten fires, two ovens, each 20x20; one elevated broiler, warming closet and circulating water heater. This firm send us a photograph of this unusually attractive range.

The Taylor & Boggis Foundry Co., Cleveland, Ohio, send us a little circular describing their Game lamp stove. This has a large tank finished in black japan and handsomely ornamented with nickel-plated cones, top grates and mica frames, also removable brass burners. An open extension top is made for each of the four sizes, while a closed extension top can be furnished for the two, three and four burners. Their line also includes an ornamental base finished in black japan or polished nickel and fitted to the two, three and four burner sizes. This firm's patented drop shelf can be used with all sizes of closed extension tops.

John Le Page, the suave representative of the Bridge & Beach Mfg. Co., St. Louis, Mo., in northern Illinois, was quite severely injured in a railroad collision on July 12 and is now confined at the Cottage Hospital, Peoria, with a broken collar bone and other injuries, which will prevent his traveling for some seven or eight weeks. Mr. Le Page is quite noted as a *raconteur* and at hardware conventions he has always been able to gather a circle of listeners to his humorous stories. His jollity is infectious and his many friends will regret to learn of his unfortunate plight.

CLAIM THERE IS NO PROFIT IN SELLING STOVES.

Canadian retail stove dealers are complaining about the scarcity of profits in handling stoves. One dealer puts the case thusly in the July 19th issue of Canadian Hardware:

"The profits to be realized handling stoves are certainly very discouraging. No, I can't exactly tell the cause of this, unless it be keenness of competition. What I believe to be an important factor in the unsatisfactory business of stoves is that dealers do not, in figuring on the price for sale, take into consideration all the elements of the cost. Thus, when they get their stove they figure on 25 per cent, but fail to reckon on the important feature of the cost of delivery or setting up. I'll show you an average case. Suppose I pay $19 for a stove. I'll reckon on 25 per cent profit. Then I'll mark the price $23.75. But I have yet to pay for taper pipe, 8c; cartage, 75c; fitting up, 90c. Mind you, I haven't considered the time spent by the boy in fixing mica or the cost of storing the stove in my shop. My profit is about $2.50 or $3. But that isn't the worst of the case. The departmental store will step in and sell this stove for $21.50, while we are making little enough by selling at $23.50. Our profits range from 12½ to 15 per cent, instead of from 20 to 25 per cent, at least.

"No, I don't object to handling second-hand stoves. If we get a poor second-hand stove, and they generally are poor, we just hand them over to the junk men for old iron and no great trouble is occasioned us. If we get a good one we can make twice as much on it as we can on regular stoves, at the same time giving our customers first-class goods. We know that profit on ranges and heating stoves is not sufficient. It wouldn't pay us to handle them outside of jobbing work and other lines. Yet I feel that ranges and heating stoves furnish us with a bulky system of expensive advertising.

"We must also compete with shops where the dealer lets his boy or wife look after the business, and he does the jobbing or fitting up. They are often content, and are often under the necessity of getting rid of stock, and they sell at a very narrow margin.

Again, their expenses are very low. We must be very careful or this will give our place the name of selling high-priced articles."

COMMON SENSE FLUE STOP.

The accompanying cut shows the Common Sense flue stop manufactured by J. K. Schick, Fairbury, Ill. This flue stop has the merits of simplicity, durability and ease of adjustment. It is, moreover, absolutely soot proof. Mr. Schick is a practical man and has produced a flue stop that has met with the hearty indorsement of dealers who have investigated its merits. He would be pleased to correspond with the trade concerning this flue stop. When writing him kindly add: "Saw it in THE AMERICAN ARTISAN."

Common Sense Flue Stop.

CHAMPION STOVE CLAY.

The Bridgeport Crucible Co., Bridgeport, Conn., have been very busy in filling orders for their Champion stove clay, a package of which is shown in the accompanying cut. This, it is claimed, is the only stove lining made of crucible materials. It is packed in 2½-lb., 6-lb., and 10-lb. pasteboard boxes and also in bulk. It is further claimed that it is the best and most refractory lining made. This firm would be pleased to correspond with the trade concerning this stove clay. When writing them kindly add: "Saw it in THE AMERICAN ARTISAN."

PEERLESS FLUE STOPPER.

The accompanying cut shows the Peerless flue stopper manufactured by the Welling Mfg. Co., Columbus, Ohio. This stop is a deserved favorite with the trade. It has steel wire springs instead of sheet iron says. It stays where it is put and is absolutely smoke and soot proof. It is made either plain or decorated. This firm have great confidence in the merits of these stoppers and in order that dealers who are unacquainted with them can see their good points they will send a miniature sample on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

Peerless Flue Stopper.

NEW STOVE CATALOGUE.

The Portsmouth Stove & Range Co., Portsmouth, O., for whom Morley Bros., Saginaw, Mich., are agents, send us a copy of their latest artistic catalogue which is just out. All this firm's six hole reservoir Model ranges are now made with extension fire box fitted with duplex grate, without water heater. Model steel ranges are made with either polished steel or japan finish.

This firm's new series of four-hole Models are in harmony in general style and make-up with the six-hole series. They have the same style fire box, nickel parts, closets, shelves and balanced oven door (but no kicker) and all the features that the larger Models have.

On the Ideal Queen, Regal Queen and Western Queen square oven ranges, the slide hearth plate pulls out and hangs down. The shelves on the square top stoves are interchangeable from end to left side. The coal stoves are provided with a cut feed or pouch feed. The Queen Hot Blast is a new heating stove that is just out. It has a body of Wood's refined sheets, large ash pit provided with large ash pan, ash pit door fitted with patented air tight register, draw center anti-clinker grate, handsome urn, nickel plating and pressed steel nickeled rings. A couple of this firm's popular heaters are found in the Model Radiator and Model Oak. The Model Radiator has large heating surface, reversible pipe collar, substantial outer casing that is easily removable and joints and all doors fitted air tight.

This firm have patented a new method of holding and ventilating the sheets of mica so they will not get out of place or smoke up.

The large, high ash pit, large ash pan, well fitted base door with turn key and patent air tight register and draw center grate are among the good features of this stove.

The Model Oak has patented an air tight ash pit register, large ash pan, draw center grate, gas burning register, check register in pipe collar, anti-buckling steel drum, sectional fire pot ring, heavy corrugated fire pot with solid top extension, smoke curtain and handsome nickeling.

One of these catalogues will be forwarded the trade on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

JEWEL STEEL RANGES.

George M. Clark & Company, 71 Lake street, Chicago, the well-known manufacturers of Jewel gas, gasolene and oil stoves, have made an important departure as they are embarking on the manufacture of Jewel steel ranges.

This firm's catalogue, showing their new line of these handsome goods, will be out before Aug. 1st, and the trade should write for same and see what this firm have to offer. When writing them kindly add "Saw it in THE AMERICAN ARTISAN."

PUMP PROFIT.

The Berger Mfg. Co., Canton, O., send us a little booklet calling attention to their corrugated galvanized steel pump. The corrugated form of the body gives great additional strength. The cast iron cylinders are models of simplicity and efficiency. A special device lets out all the water in the pump itself whenever desired. The base is adjustable and may be set at any height. This booklet sets forth the advantages of this pump in an easy conversational way. It will be forwarded the trade on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

The Hardware Record.

American Hdw. Mnfs. Assn.

Pres., F. R. Plumb, Philadelphia.
Vice-Pres. — Samuel Nicholson, Providence; C. S. Van Wagoner, Cleveland; F. S. Kretsinger, Fort Madison, Ia.
Sec., F. D. Mitchell, Pittsburg.
Ex. Com., Robert Garland, Chairman, Pittsburg; Henry B. Lupton, Pittsburg; N. A. Gladding, Indianapolis; W. S. McKinney, Allegheny, Pa.; Samuel Disston, Philadelphia; C. E. Adams, Cleveland; James P. Kelly, Alexandria, Ind.; J. C. Birge, St. Louis.

Arkansas Retail Hdw. Dealers Assn.

Pres., John M. Pitman, Prescott.
1st V.-P., J. F. Maxey, Ozark.
2d V.-P., T. B. Stewart, Newport.
Sec., C. E. Taylor, Little Rock.
Ex. Com., H. Williams, Hot Springs; J. H. Boicourt, Little Rock; E. E. Mitchell, Woinlton; W. M. Graham, Clarendon; R. F. Roys, Russellville.

Chicago Retail Hdw. Dealers' Assn.

Pres., D. McLaughlin.
V.-P., H. E. Gnadt.
Sec., G. R. Lott.
Collector, John Hora.
Treas., J. L. Smith.

Hardware Merchants' and Manufacturers' Assn of Philadelphia.

Pres., William C. Peters.
V.-P., Thomas Devlin.
Sec.-Treas., T. James Fernley.
Directors, W. W. Supplee, H. McCaffrey, E. S. Jackson, W. C. Peters, S. Disston, E. Fisher, J. H. Ritter, T. Devlin, T. J. Fernley.

Illinois Retail Hdw. Dealers' Assn.

Pres., H. G. Cormick, Centralia.
V.-P., D. Holder, Bloomington.
Sec., L. H. Clark, Rockford.
Treas., F. F. Porter, Chicago.
Ex. Com., H. G. Cormick, Centralia; D. Holder, Bloomington; L. H. Clark, Rockford; F. F. Porter, Chicago; Z. T. Miller, Bloomington; W. T. Gormley, Chicago; H. N. Murphy, Galesburg; C. Mauer, East St. Louis; R. G. Scheurer, Vandalia; F. W. Siecke, Freeport.

Indiana Retail Hdw. Dealers' Assn.

Pres., W. P. Lewis, New Albany.
V.-P. Jas. L. Fulton, Portland.
Sec.-Treas., M. L. Corey, Argos.
Members Ex. Com., I. A. Sibley, South Bend; E. M. Bush, Evansville; W. H. Weed, Vincennes.

Indian Territory Retail Hdw. Assn.

Pres., J. G. Smith, Canadian.
1st V.P., Fred Parkinson, Wagoner.
2d V.-P., E. C. Stretch, Vinita.

Iowa Retail Hdw. Dealers' Assn.

Pres., W. A. McIntire, Ottumwa.
V.-P., J. Seither, Keokuk.
Sec., W. H. Keating, Ottumwa.
Treas., Geo. Lister, Manchester.
Exec. Com., J. Seither, Keokuk; Clarence Philips, West Liberty; L. Lindenberg, Dubuque, T. J. Lomas, Cresco; C. F. Schmidt, Marshalltown; Homer Duncan, Albia; L. H. Kurts, Des Moines; C. R. Keating, Mt. Ayr; Chas. Swaine, Council Bluffs; H. S. Vincent, Ft. Dodge; W. H. Millard, Cherokee.

Kansas Hardware Dealers' Assn.

Pres., Oscar Roehr, Topeka.
V.-P., E. J. King, Logan.
Sec.-Treas., J. A. Cole, Topeka.
Ex. Com., F. W. Bartlett, Kansas City; T. H. Kiniry, Beloit; J. M. Walters, Robinson; J. H. Hamilton, Arkansas City; T. J O'Neill, Osage City.

Kentucky Retail Hardware and Stove Dealers' Association.

Pres., W. T. Oldham, Mt. Sterling.
1st V. P., J. L. Macin, Vine Grove.
2d V.-P., W. S. Shackleti, Fulton.
Sec., Paul Wagner, Louisville.
Treas., Henry Heick, Louisville.

Michigan Hardware Association.

Pres., H. C. Minnie, Eaton Rapids.
V.-P., Geo. W. Bruske, Saginaw.
Sec.-Treas., H. C. Weber, Detroit.
Asst. Sec., C. A. Day, Detroit.
Exec. Com., Samuel Winchester, Jackson. Fred S. Cook, Fowlerville; C. E Pipp, Otsego; A Harshaw, Deiray. A J. Scott, Marine City; James J. Potter, Alpena; John W. Jochin, Ishpeming; Robt. G Chandler Coldwater, John Popp, Saginaw, F Carlton, Calumet.

Minnesota Retail Hardware Assn.

Pres., W. H. Tomlinson, LeSueur.
V.-P., H. S. Cleveland, Minneapolis.
Treas., W. E. Barto LongPrairie.
Sec., M. S. Matthews, Mnpls.
Exec. Com., W. H. Tomlinson, Le Sueur; H. S. Cleveland, Minneapolis; F. E. Hunt, Red Lake Falls; Benj. F. Kernkamp, St. Paul; A. C. Hatch, Battle Lake; Jos. Mason, St. Peter; C. F. Ladner, St. Cloud; J. Schmidt, Wabasha; E. H. Loyhead, Fairibault. A. T. Stebbins, Rochester; J. McGuire, St. Paul.

Missouri Retail Stove and Hardware Dealers' Association.

Pres., Tayler Frier, Louisiana.
V.-P., Ed L. Wachter, St. Louis.
Sec., F. M. Neudorff, St. Joseph.
Ex. Com., J. W. Poland, Carrolton; F. A. Kannsteiner, St. Louis; Frank Mayer, Macon.

National Hardware Association.

Pres., R. A. Kirk, St. Paul.
1st V.-P., John C. Koch, Milwaukee.
2nd V.-P., Brace Hayden, San Francisco.
Sec.-Treas., T. James Fernley, Philadelphia.
Ex. Com., W. K. Belknap, Louisville; Samuel B. Bigelow, Boston; P. E. Strauss, Boston; J. D. Moore, Birmingham; R. M. Dudley, Nashville; W. S. Wright, Omaha.
Advisory Board, W. W. Supplee, Philadelphia; H. H. Bishop, Cleveland; John Bindley, Pittsburg; R. W. Shapleigh, St. Louis.

Nebraska Retail Hdw. Dealers' Asn.

Pres., T. W. Morton, Omaha.
1st V.-P., C. K. Lawson, Hastings.
2d V.-P., W. T. Coleman, McCook.
3d V.-P., J. C. Cornell, Ord.
Sec.-Treas., Harry Hall, Lincoln.

National Retail Hdw. Dealers' Asn.

Pres., H. G. Cormick, Centralia, Ill.
V.-P., C. N. Barnes, Grand Forks.
Sec., M. L. Corey, Argos, Ind.
Treas., W. Bogardus, Mt. Vernon.
Exec. Com., W. P. Bogardus, Mt. Vernon, O.; O. P. Schlafer, Appleton, Wis.; C. F. Ladner, St. Cloud, Minn.; W. A. McIntire, Ottumwa, Ia.; S. E. Jones, Richmond, Ind.

N. Dakota Retail Hdw. Dealers' Asn.

Pres., H. N. Joy, Hamilton.
V.-P., H. F. Emery, Fargo.
Sec., C. N. Barnes, Grand Forks.
Treas., W. H. Pinkerton, Lakota.
Ex. Com., H. Harrington, Fargo; W. W. Jamieson, Wahpeton; Anton Enger, Cooperstown; Frank Lish, Dickinson; H. F. Strehlow, Casselton; I. L. Newgard, Grafton.

Ohio Hardware Association.

Pres., W. P. Bogardus, Mt. Vernon.
V.-P., L. F. Stahler, Waverley.
Cor. Sec., D. R. Burr, Piqua.
Fin. Sec., W. C. Jones, Columbus.
Treas., H. A. Waller, Ravena.
Ex. Com., J. B. Carson, Hamilton; C. D. Cussins, Columbus; C. W. Jewell, Utica; M. B. Talmage, Mt. Gilead; H. F. Rahe, Columbus; J. Rohrbacher, Akron; A. H. Strome, Warsaw; Geo. G. Meyer, Cincinnati.

Pennsylvania Retail Hdw. Assn.

Pres., Geo. L. Moore, Brownsville.
V.-P., Geo. J. Rudolph, Pittsburg.
Sec., J. E. Digby, McKees Rocks.
Treas., B. A. Maggine, Braddock.
Ex. Com., A. L. Casselbury, Pittsburg; E. E. Lyon, Greensburg; C. N. Savage, California; B. A. Maggine, Braddock; C. O. Shroyer, Dawson.

St. Louis Stove Dealers Assn.

Pres.- F. A. Kansteiner.
1st V.-P., Aug. Steinmeyer.
2d V.-P., Aug. Gruendler.
Sec., A. F. Geschwindner.
Treas., L. J. Boehl.

Southern Hardware Jobbers' Assn.

Pres., F. A. Heitman, Houston, New Orleans.
1st V.-P., Col. B. F. Eshelman.
2d V.-P., John Donnan, Richmond, Va.
Sec., C. B. Carter, Knoxville.
Ex. Com., W. M. Crumley, Atlanta, Ga.; O. B. Barker, Lynchburg, Va.; Chas. H. Ireland, Greensboro, S. C., C. S. Speer, Hot Springs Ark.

Texas Hardware Jobbers' Assn.

Pres., Jas. Moroney, Dallas.
1st V.-P., J. C. Bering, Houston.
2d V.-P., J. Burnsides, Ft. Worth.
Sec.-Treas., R. Bell, Weatherford.
Ex. Com., G. A. Trumbell, Dallas; F. A. Heitman, Houston; E. S. Hughes, Abilene; J. J Dickerson, Paris.

Wisconsin Hdw. Dealers' Assn.

Pres., O. Schlafer, Appleton.
V.-P., L. Findlesen, Green Bay.
Sec.-Treas., C. A. Peck, Berlin.
Ex. Com., J. Kornelly, Milwaukee; E. H. Ramm, New London; A. Noll, Chilton; H. L. McNamara, Janesville.

Abbott & Wise, manufacturers of scales, have started in business at Creston, Ia.

G. A. Aber, a prominent Eustis, Fla., hardware dealer, died on July 12 last.

Zahn & Ibert have purchased the hardware business of Foster Bros. at Roberts, Ill.

The Kruse Hardware Co. are a new Cincinnati, Ohio, concern capitalized at $200,000.

Aug. Rohns, a hardware merchant in Windsor, Canada, died in that city on July 13.

The Estate of H. Hoerth, Pe Ell, Wash., have sold their hardware store to J. A. Pearsoll.

Stagg & Conrad are succeeded in the hardware business at Anaconda, Mont., by Jas. P. Stagg.

William Christensen has succeeded T. B. Lamson in the hardware business at Ellensburg, Wash.

A. J. Coleman, a prominent hardware dealer of Platte City, Mo., died on July 17. He was 55 years old.

H. R. Hawley, a pioneer hardware dealers in Beaver Dam, Wis., died on July 20th in the 71st year of his age.

The Schaub Hardware & Iron Co., E. St. Louis, Ill., are fixing up a ware-room 25x100 feet in dimensions.

The Clearfield Steel and Iron Co. are a new Clearfield (Pa.) concern who will erect a plant costing $200,000.

The Empire Wire Co., Utica, N. Y., are adding an annealing department 40x35 feet in dimensions to their plant.

A recent fire in Meriden, Conn., caused a loss of $5,000 to the brass foundry of the Chas. Parker Co. of that place.

The American Hardware Corporation of New Britain, Conn., announce the election of A. N. Abbe as purchasing agent.

The U. S. Fence Co. are a new Portland, Ore., concern capitalized at $15,000 for the purpose of operating a wire fence plant.

M. Sondag, O. E. Wilson and H. A. Reese are the incorporators of the Reese Hardware Co., E. St. Louis, Ill., capitalized at $5,000.

The Bolt and Nut Manufacturers' Association held a meeting at the Thousand Island House, Alexandria Bay, New York, on July 16.

A new company capitalized at $20,000 has been organized at Sturgis, Mich., to manufacture galvanized iron tanks and steam cookers.

W. H. Sample & Sons, prominent Albany, N. Y., dealers in cutlery, have moved into their new store at 36 S. Pearl street that city.

A. W. Hucke, Otto Oyssell and Henry Hucks are the incorporators of the A. M. Hucke Hardware Co., Kansas City, Mo., capitalized at $5,000.

T. H. Dewey, John Curtin and W. R. Dorman are the incorporators of the Curtin & Dewey Hardware Co., New York city, capitalized at $25,000.

The Star Aluminum Co., Doylestown, O., have reorganized and increased their capital stock to $25,000. J. Keller is president, A. W. Clapper is secre-

tary and treasurer and J. A. Heman is superintendent of the company.

Geo. P. Adams, Geo. Ryan, and Chas. A. Moore are among the incorporators of the King City Hardware Co., King City, Mo., capitalized at $10,000.

J. C. Ginter is president, J. J. W. Wilson is vice president, and G. L. Coleman is secretary of the Miami Scale Co., Miami, Ind. Ty., capitalized at $10,000.

Fielding L. Mercer, Joseph G. Brannun and W. S. Brannun are the incorporators of the Brannun Hardware Co., Alexandria, Ind., capitalized at $10,000.

The Hollidaysburg Iron & Nail Co., Hollidaysburg, Pa., are erecting an addition to their plant which will include a finishing mill 100x200 feet in dimensions.

Josiah Grout, Harry H. Vincent and John A. Kittlisen are the incorporators of the Moline Scale Co., Moline, Ill., capitalized at $20,000 for the manufacture of scales.

Jas. McCauley, an employe of the American Car & Ship Hardware Co., New Castle, Pa., was severely injured on July 15 by being struck on the forehead with a flying ring.

J. W. Schatt, C. B. Morgan and J. V. Crouch are the incorporators of the Schatt & Morgan Co., Gowanda, N. Y., capitalized at $25,000, for the manufacture of cutlery.

Robert Papendeil, Max Statgen, Adolph E. Bryon, Roscoe C. Stacy and Jas. A. Hudson are the incorporators of the Standard Cutlery Co., Brooklyn, N. Y., capitalized at $50,000.

William S. Babcock, president of the Waterville Cutlery Co., Waterville, Conn., died in that city on July 13 from pernicious anaemia. He was in the 45th year of his age.

The Kokomo Steel & Nail Works, Kokomo, Ind., commenced operations on July 16. Their mill, which will operate outside the trust, will employ a thousand people. Their plant cost $750,000.

The Hamilton-Messenger Co. are a new Oskaloosa, Ia., hardware concern, who succeed Hamilton & Hamilton. The new company commenced business July 22 with a capital stock of $15,000.

W. W. Bingham, for a number of years in the hardware business at 201 Lake street, Chicago, recently celebrated his golden wedding at 87 N. Kedzie avenue, this city. Mr. and Mrs. Bingham are each 73 years old and were married July 19, 1852, at Salem, Wis.

The American Tube & Stamping Co., Bridgeport, Conn., are erecting a new plant. The main building will be 610x110 feet in dimensions; the machine shop will be 450x90 feet; the boiler house will be 50x 25, and the blooming mill will be 275 feet in length.

The Aegis Mfg. Co., Marshalltown, Iowa, send us a little circular showing their Diamond flexible flat wire door mat. This is made of 18-gauge galvanized steel wire. The jointed sections of the mat are 6 inches long, and these sections are connected with double flat wire passing through the mat meshes.

The New Century Spray Pump Co., Rochester, N. Y., send us a circular calling attention to the Century potato masher and peel separator. Owing to the peculiar shape of the bottom in the masher, a very slight pressure immediately breaks the potato in several pieces. This implement can be used for tomatoes, currants, apple sauce and for all purposes where it is desired to separate the skins and seeds from the fruit.

The trade will learn with deep regret of the death of Crandall A. Rosencrans, secretary of the Allerton-Clarke Hardware Co., 115 Lake street, Chicago, Ill., which took place on Friday evening, July 18. Mr. Rosencrans was dining at the Union restaurant in Randolph street when he was suddenly taken ill. A friend placed him in a cab and drove to the Sanitarium Hospital. Mr. Rosencrans died within a few minutes after reaching same. The cause of death was apoplexy.

The John Pritzlaff Hardware Co., Milwaukee, Wis., send us a handsome sporting goods catalogue for the season of 1902-1903. The goods shown in this volume include guns, rifles, revolvers, ammunition, powder, canvas clothing, gun case covers, etc. On page 2 of this volume is shown their double-barrel Belgian shot gun with top lever action, rebounding back action locks, circular hammers, extended rib, checkered pistol grip, and patent fore-end, case-hardened mountings, walnut stock, and iron butt plate. This 72 page volume contains a large amount of valuable information for all sportsmen and will be sent to the trade on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

The Stengel Mfg. Co., Hamilton, Ohio, send us a little circular describing the Stengel caster. The upper bearing on the stem consists of a rolling box containing eight steel anti-friction rolls, and they are so arranged that the wear is distributed instead of occurring in one place. The anti-friction provision of the stem accomplishes a double result—namely, it permits the swivelling to take place with the utmost ease and at the same time permits the oscillation of the housing to take place with similar freedom. The oscillation is so easy that both floor wheels always bear on the floor, thus realizing the true merit of the double-wheel casters, which permit the two wheels to roll on the carpet instead of pivoting on the carpet and wearing it.

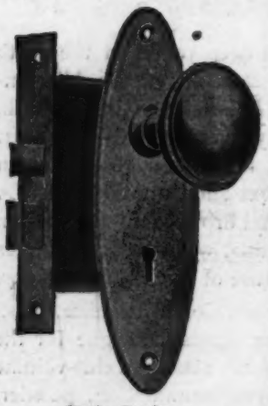
TRIUMPH FRUIT CAN WRENCH.

The Forbes Chocolate Co., 210 Sheriff street, Cleveland, Ohio, are manufacturers of the Trimuph fruit can wrench shown in the accompanying cut. This wrench is made of steel nickel-plated. It works both ways, is self-adjusting and will not break or get out of order. It opens jars easily without slipping and breaking of cans or covers. This firm materially aid the trade in the sale of this wrench by liberal advertising in such paper as the Ladies' Home Journal, Youth's Companion, Woman's Home Companion, Delineator, Designer, Farm Journal, Normal Instructor, World's Events, Ladies' World and Christian Herald.

Triumph Fruit Can Wrench.

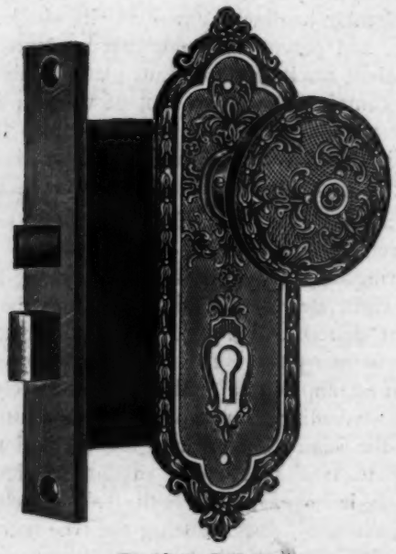
SPECIAL LOCKS.

The accompanying cuts show special design locks manufactured by the Taylor & Boggis Foundry Co., Cleveland, Ohio. The Clyde design is in wrought steel and bronze metal. In sets Nos. 2607 and 3607 the lock is reversible, 4¾x3½ inches, with one nickel-plated steel main and two night keys. No. 2607 has 1006 cast iron front, wrought steel strike, bronze bolts, one steel tumbler each on night and dead bolts and twelve changes, solid hub.



Clyde Design.

The knobs are 2¼x2¼ inches, the outside escutcheon is 10x3 inches and inside escutcheon is 2¼x 1⅛ inches.



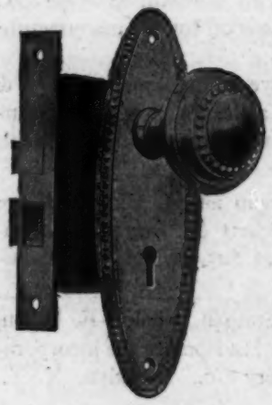
St. Clair Design.

The St. Clair design is made in cast bronze metal. Their front door set has reversible lock, 4¾x3¾ inches, one nickel-plated steel main and two night keys, knobs 2¼x2¼ inches, with 5-16-inch swivel spindle, outside escutcheon 8½x2½ inches and inside escutcheon 2¼x2⅛ inches.

Hudson Design.

This set has No. 1156 cast bronze front strike and bolts, one steel tumbler each on night and dead bolts and twelve changes swivel hub.

The Hudson design is made in wrought steel and bronze metal, old copper finish. The front door sets have wrought steel trimmings or wrought bronze metal trimmings. The style with wrought steel trimmings has reversible lock, 4¾x3½ inches, one nickel-plated steel main and two night keys, knobs 2¼x2¼ inches, outside escutcheon 7½x2 5-16 inches, and inside escutcheon 1¾x1 inch. They have No. 1006 cast iron front, wrought steel strike, bronze bolts, one steel tumbler each on night and dead bolts and twelve changes, solid hub.

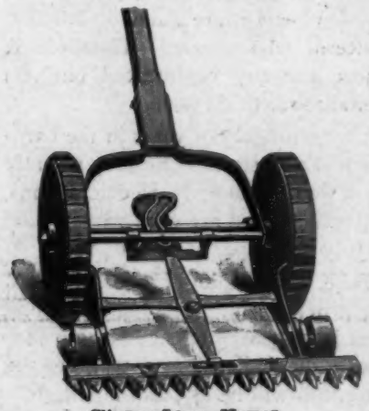


Newport Design.

The Newport design is made in wrought steel and bronze metal. Their front door sets No. 2606 have wrought steel trimmings. The reversible lock is 4¾ x3½ inches and there is one nickel-plated steel main and two night keys. The knobs are 2¼x2¼. The outside escutcheon is 10x3 inches and the inside escutcheon is 2¼x1⅛ inches. It has No. 1006 cast iron front, wrought steel strike, bronze bolts, one steel tumbler each on night and dead bolts, twelves changes and solid hub.

CLIPPER LAWN MOWER.

The accompanying cut shows the popular Clipper lawn mower manufactured by the Clipper Lawn Mower Co., Norristown, Pa. This mower, it is claimed, kills all the weeds in the lawn.



Clipper Lawn Mower.

By its use the weeds can be kept cut so they do not go to seed and the grass is cut without any breaking of small radical feeders. As a result the grass becomes thick and the weeds disappear. The Clipper gives excellent service everywhere, but it is specially adapted for new lawns. It is, as everyone knows, a hard thing to start a lawn owing to the fecundity of weeds, but the use of this lawn mower obviates the necessity of tediously weeding the grass plot weed by weed. Catalogue and prices will be forwarded the trade on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

EXECUTIVE COMMITTEE OF PENNSYLVANIA RETAIL HARDWARE DEALERS ASSOCIATION HOLD MEETING.

A special meeting of the Pennsylvania Retail Hardware Dealers' Association was held at the Monongahela House, Pittsburg, Pa., on July 7th, President Moore in the chair and the following members present: A. M. Gregg, J. H. Bowers, C. H. Miller, John H. Coulter, L. C. Fox, George H. Hegner and J. E. Digby.

The meeting opened at 11 a. m. C. H. Miller, chairman of the insurance committee, made a report, after which Mr. Simpson from Huntingdon, was listened to on the subject of "Mutual Insurance." On motion of J. H. Bowers, seconded by G. H. Hegner, the report of insurance committee was adopted. On motion of C. H. Miller, seconded by J. H. Bowers, the second section of the by-laws was amended to read six dollars.

President Moore appointed the entertainment committee as follows: J. H. Bowers, A. Q. Casselberry, and W. H. Taylor.

The meeting reconvened at 1:45 p. m. Samuel McKnight, having positively refused to serve as a member of the executive committee, L. C. Fox was appointed by the president to fill the vacancy.

The salary of the secretary was placed at $300 for the current year, contingent on sufficient funds being received to pay that amount, said salary having been fixed by the executive committee and approved by the association.

The following persons were elected as directors of the "Pennsylvania Hardware Mutual Insurance Co.":

C. H. Miller, S. S. Bryan, George W. Hackett, George L. Moore, C. J. Kirk, J. H. Bowers, Thompson, J. E. Digby, A. M. Gregg.

The following legislative committee was appointed by the president:

S. S. Bryan, John W. Seaman, J. F. Frye, J. B. Holderbaum, H. F. Robinson.

On motion of C. H. Miller, seconded by L. C. Fox, it was decided that ten members of the association should constitute a quorum for the transaction of business. The meeting then adjourned.

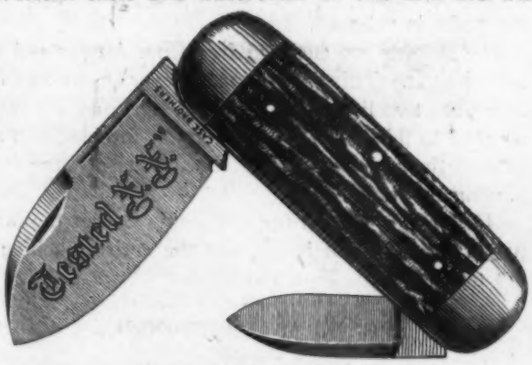
CHICAGO HARDWARE CLUB WILL CONTINUE.

The Committee on Organization of the Chicago Hardware and Manufacturers' Club, consisting of D. W. Simpson, chairman; W. H. Bennett, D. B. Woodbury, D. B. Gann, W. G. Miller and H. H. Roberts, secretary, have sent out the following notice to the membership under date of July 22:

"We take this early opportunity of announcing with extreme regret that the Technical Club (the home of the Hardware and Manufacturers' Club) is in the hands of a receiver and will probably close its doors. This information comes to you, as it did to your committee, as a very great surprise and as something entirely unlooked for. We shall do everything in our power to protect the interests of the Hardware and Manufacturers' Club. The Hardware and Manufacturers' Club will continue as an organization and we hope to again have the pleasure of entertaining the jobbers who will pass through Chicago en route to the convention in New Orleans in November. We regret exceedingly this misfortune in our early history."

HAND-FORGED POCKET KNIFE.

The accompanying cut shows the pocket knife manufactured by the Case Bros. Cutlery Co. The Western office and warerooms of this firm are with

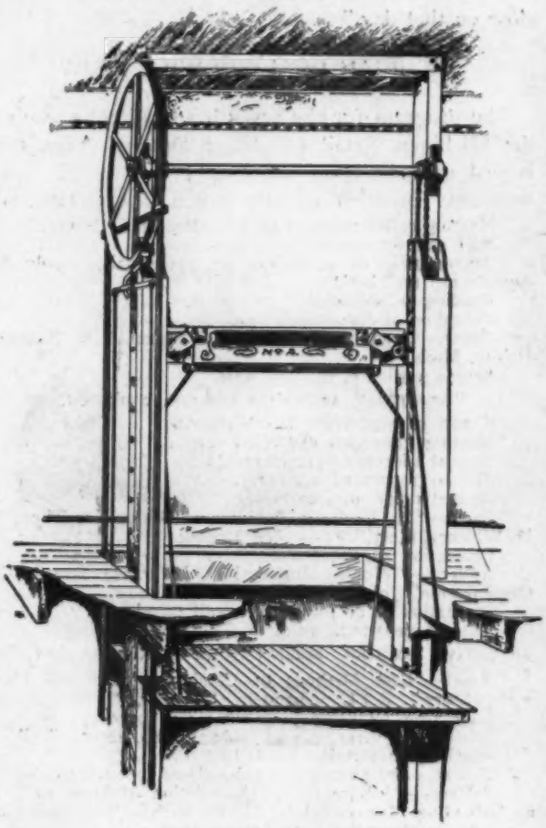


Hand-Forged Pocket Knife.

C. S. Hughes & Co., Downers Grove, Ill. This knife is made in pearl and stag. It is hand-forged and is high tempered. This firm would be pleased to send prices and samples to the trade on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

ANTI-FRICTIONAL QUICK-RAISING ELEVATOR

Kimball Bros., Council Bluffs, Iowa, are manufacturers of the anti-frictional, quick-raising elevator No.



Anti-Frictional Quick-Raising Elevator.

2 shown in the accompanying cut. This is an admirable elevator for use in retail hardware stores.

There are no roller boxes on the journals. The car is fitted with rollers to roll against hardwood guides and there are no sliding surfaces. The brake is an improved shoe brake. This elevator can be locked with the platform at any point and handled entirely with either brake rope. All ropes are inside of the hatchway convenient to the operator. The counter-balance weights are heavy enough to raise a small load when the brake is released.

The weights are enclosed free from danger and are out of sight. This firm secure a leverage of 25 to 1. There are two lift chains made of steel and especially adapted to this use. The eveners on the platform are to keep them always pulling it straight and free from binding or dragging.

Hard maple is used for everything except the large timbers and weight boxes and the entire machine is put together with bolts and screws.

PICNIC IS POSTPONED.

Fred Ruhling, secretary of the picnic committee of the Chicago Retail Hardware Association, has sent out the following notice to the membership:

"The picnic of the Chicago Retail Hardware Association to be held at Palos Park has been postponed until Wednesday, July 30, 1902. All tickets and arrangements made for July 16 will hold good for this day.

"Trains leave Dearborn station at 9:30, 10:30 and 1:15.

"It is the desire of the association that all dealers close on that day."

MICHIGAN DEALERS WILL MEET.

The program for the seventh annual convention of the Michigan Retail Hardware Dealers' Association is just out and is as follows:

WEDNESDAY MORNING SESSION, 10 A. M., AUGUST 13TH, 1902.

Meeting called to order by President H. C. Minnie.
Roll call by secretary.
Appointment of committee on credentials, resolutions, constitution and by-laws.
Reading of minutes.
Reception of communications.
Paper—"Organization, Local and General," A. Harshaw, Delray, Mich.
Recess until 2 p. m., city time.

WEDNESDAY AFTERNOON SESSION, 2 O'CLOCK.

Report of committee on credentials.
Meeting goes into executive session.
Annual address of president
Annual report of treasurer.
Annual report of secretary.
Paper—"My Faults in Business as Others See Them," J. H. Whitney, Merrill.
Discussion of the same.
Address—"Would Mutual Fire Insurance Benefit Our Organization" John Popp, Saginaw.
Discussion to be joined in by all members.
Adjournment until 10 a. m. Thursday morning.

THURSDAY MORNING SESSION 10 A. M., AUGUST 14TH, 1902.

Paper—"Best Methods of Conducting a Retail Hardware Store," R. G. Chandler, Coldwater.
Suggestion by members on the above speech.
"Retailer's View of a Jobber Who Retails," B. F. Schumacher, Ann Arbor.
Remarks and anecdotes on the above speech by delegates.
Address—"Advice to the Association of How to Treat an Offending Manufacturer," H. W. Weber, West Bay City.
Adjourned until 2 p. m., city time.

THURSDAY AFTERNOON SESSION, AUGUST 14TH, 2 P. M.

Report of committee on resolutions, constitution and by-laws.
Consideration of the same.
Address—"Each Viewing the Other, Consumer Versus Retailer," Hon. B. A. Nevins, Otsego, Mich.
Unfinished business.
New business.
Election of officers.
Miscellaneous business for the good of the order.
Adjournment.

HARDWARE CONDITIONS IN THE NORTHWEST.

F. W. Hurty of Farwell, Ozmun Kirk & Co., St. Paul, in a recent interview in the St. Paul Dispatch said:

"Prices in all lines are very firm. There is trouble in getting seasonable articles on account of the way in which the manufacturers are crowded with orders. Leading manufacturers of builders' hardware are from three to six months behind with their orders. Very heavy building operations in New York, Chicago, Pittsburg, Cleveland and other leading cities, especially in the east, are responsible for the paucity of builders' hardware. Under such conditions it is impossible for jobbers to give good service to their customers.

"The volume of trade shows a healthy increase over last year and the increase would be greater if it were not for the difficulty in getting the goods. Frequently wants in the hardware line are anticipated by the jobbers six months or a year in advance in order to insure delivery of the goods in season.

"There is an extraordinarily heavy demand for stoves this year, due in all probability, to the great influx of settlers to the Northwest."

BUSINESS CHANGES.

NEW FIRMS.

Newton, Ia.—William Schultz.
White, S. Dak.—White Hardware & Implement Co.
Nashwauk, Minn.—Paul Tvedt.
Littleport, Ia.—August Grueel.
Lewisburg, Tenn.—Clayton Hardware & Furniture Co.
Fond du Lac, Wis.—Mr. Tobin.

BUSINESS CHANGES.

Guthrie, Ky.—Choat & Webb are succeeded by H. H. Choat.
Salem, Ala.—J. H. Rodgers succeeds C. M. Howard.
Judsonia, Ark.—O. R. Rich & Son succeed L. A. Young & Co.
Scottsville, Ky.—R. E. Wilson & Co. are succeeded by Lewis & Hinton.
Parkersburg, W. Va.—The Chancellor Hardware Co. succeed the West Virginia Hardware Co.
Dalhart, Tex.—Jones & Wright succeed W. W. Martin & Bros. in the hardware business.
Elkton, Ky.—Miller & Sullivan are succeeded by H. C. Miller & Co.
Ackley, Ia.—R. Heinz is succeeded by H. A. Miller.
Richland Center, Wis.—Chandler & Speidel are succeeded by Ward Lamberson, who has formed a partnership with E. M. Chandler.
Chares City, Ia.—Eugene W. Holbrook succeeds L. B. Gardner.
Lind, Wash.—The Lind Hardware Co. succeed J. M. Moulton.
Rantoul, Ill.—Mr. Hall is succeeded by R. C. Grays.
Rockwell City, Ia.—Warthow & Co. have sold out to Stage Bros.
Cle Elum, Wash.—Wilgus & Werlich are successors to H. Wilgus.
St. John, Wash.—J. S. Allbright succeeds Heglar Bros.
Puyallup, Wash.—F. A. Stewart is succeeded by R. & A. Fredrickson.

MISCELLANEOUS.

Hopkinsville, Ky.—H. M. Garton Sons; fire.
Columbia, Tenn.—Dobbins & Ewing, fire; loss $5,000.
Conway, N. Dak.—Rushiska & Van Dracheck; fire.
Lee, Ill.—C. W. C. Cutts; fire.
Watonga, Okla.—Koch Hardware Co.

Heating and Ventilating.

On July 15 work was commenced on the foundry of the Barberton Brass Valve & Fitting Co., Barberton, Ohio.

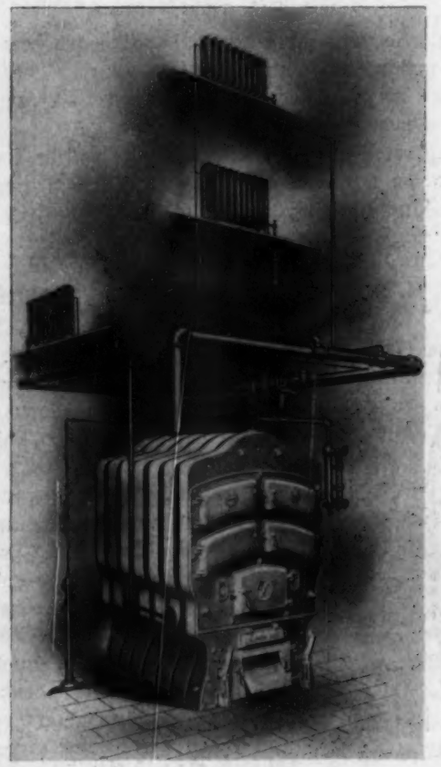
Sayre Bros. are a new Hampton, Va., concern who will engage in general foundry, steam, hot water and hot air work.

W. H. Colebrook Sons & Co., Syracuse, N. Y., send us a clever little circular to which is attached a miniature duster which is a fierce combination of red, pink, purple, green, yellow and white feathers. The motto is "We want your dust," and attention is called to the merits of Colebrook's Crown asbestos furnace cement.

The Hart & Cooley Co., New Britain, Conn., for whom the Stanley Works, New Britain, Conn.; 79 Chambers street, New York, and 19 Lake street, Chicago, are general sales agents, are manufacturers of the H. & C. wrought steel registers. These registers are strong, light and handsome. They are furnished with wrought steel or wrought brass face plates and in all finishes.

JAS. A. TRANE INDIRECT GRAVITY VACUUM SYSTEM.

The accompanying cut shows the Jas. A. Trane indirect gravity vacuum system offered the trade by



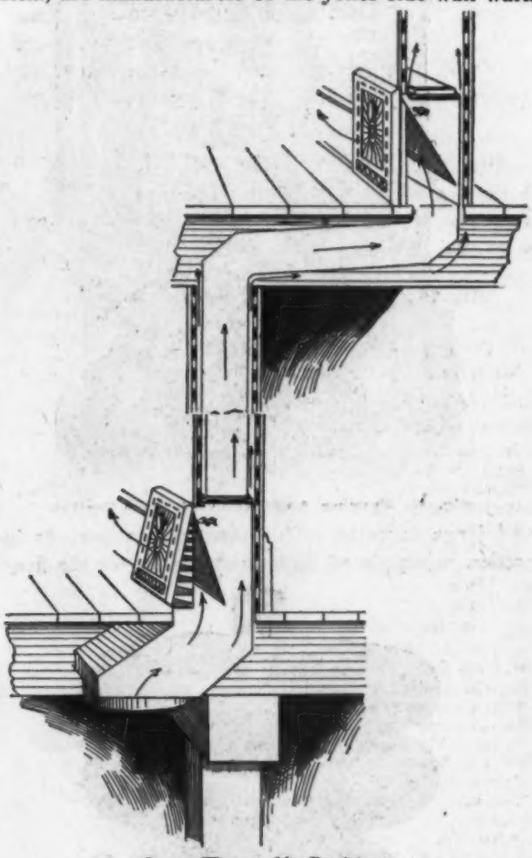
Jas. A. Trane Indirect Gravity Vacuum System.

the Jas. A. Trane Vacuum Heating Co., 40 Dearborn St., Chicago.

With this arrangement the mercury seal, which is placed near the boiler in basement, is connected by a system of air piping, the Trane automatic air valve being attached directly to each radiator. With this apparatus the weight of the diaphragm lever is adjusted to procure at least one-half pound pressure, or such pressure as may be required to warm a building in any weather. The pressure thus procured expels the air from the radiation, forcing same through the system of air piping, down through the mercury seal to the atmosphere. When the temperature in the plant falls to 212 degrees, and condensation takes place, a vacuum is created—the pressure of air upon the surface of the mercury forcing the mercury up the mercury tube to a height corresponding to the difference between the internal and the external pressure. Sufficient mercury is provided in the seal to thoroughly overcome atmospheric pressure, which, at the sea level, is 14.7 pounds. In this way the air is prevented from re-entering the system, and thus, by condensation, vacuum is obtained and maintained for many hours, or if the plant is perfectly tight, forever, or at least at indefinite length of time.

THE JONES WARM AIR REGISTER.

The United States Register Co., Ltd., Battle Creek, Mich., are manufacturers of the Jones side-wall warm



Jones Warm Air Register.

air registers shown herewith. This cut shows the Jones register with deflector set, allowing 78 square inches (the area of a ten-inch pipe) to be delivered into the first floor room, and the full capacity of the wall pipe to the second floor room. They are also made for one floor work only.

These registers can be placed in any partition where 3¾-inch studding is used, and there is no necessity of cutting the lath or plaster on the other side.

CHAMPION HOT WATER COMBINATION HEATERS.

F. D. Stolz, 115 Lake street, Chicago, is offering the trade the Champion hot water combination heaters, which are designed for use in all styles of hot

Fig. 1. Base Section When Used Without Ring Sections.

air furnaces. Illustrations showing these specialties and their method of application readily demonstrate their superiority for neatness of design, adaptability

Fig. 2. Showing Application of Base Section.

and large capacity. This construction permits base section being placed directly at the top of the fire, in

Fig. 3. Base Section with Ring Sections Added.

which position its large surfaces are subjected to the strongest effect of the fire which passes over the outer as well as inner surfaces, as shown in its application in Fig. 2.

In the fourth illustration is shown an application of base section with ring sections attached for large capacity, the opening in top of base permitting flames and reflection of the fire to come in direct contact with

Fig. 4. Application of Base Section with Ring Sections Attached for Large Capacity.

rings. Sections are connected with extra heavy nipples, making all joints absolutely secure. These heaters are made in five diameters from 12 to 23 inches and in capacity from 50 to 700 feet.

Illustrated price list and discounts will be forwarded to the trade on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

O. K. ROTARY BALL-BEARING WASHER.

The H. F. Brammer Mfg. Co., Davenport, Iowa, are manufacturers of the original O. K. rotary ball-bearing washer shown in the accompanying cut. This firm are also manufacturers of the original O. I. C. pendulum washer and the original improved Brammer washer. These washers have gold and copper bronzed hoops and castings. This firm would be pleased to send quotations and particulars concerning these washers on request. When writing for same kindly add. "Saw it in THE AMERICAN ARTISAN."

O. K. Rotary Ball-Bearing Washer.

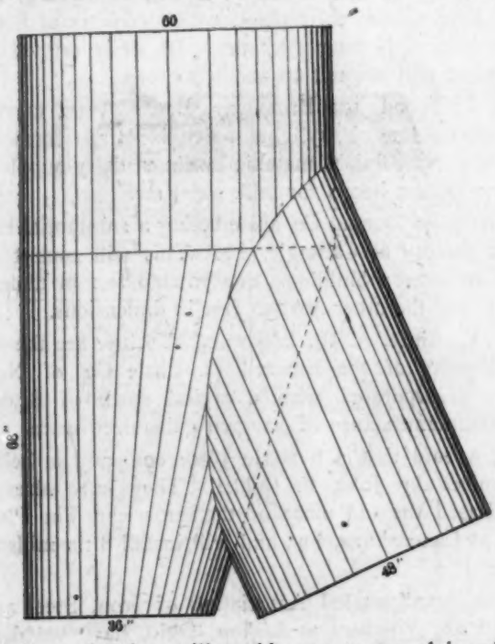
It is said that two attempts have been made to burn the tin mill of the American Tin Plate Co., located at Lisbon, Ohio. Damage to the extent of $1,500 has been done.

Tinshop.

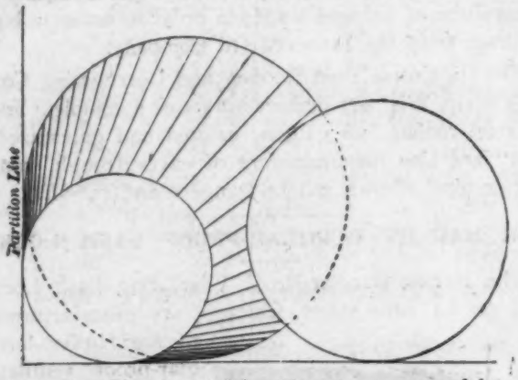
FLARING CONE AND PIPE JOINT.

To The American Artisan.

To describe a flaring cone and pipe joint I think



that these sketches will enable one to see plain what



is desired. Give it a trial, old and young, and let us hear from you soon. "Snips."

Dubuque, Ia., July 20, 1902.

PATTERNS WANTED.

To The American Artisan.

Would like patterns for wash boilers and quart tin cans. "Ed."

———, Ill., July 22, 1902.

DISAPPROVES OF ANONYMOUS COMMUNICATIONS.

To The American Artisan.

Would like to suggest to the correspondents who have from time to time sent pattern problems to The American Artisan that if they expect them answered it would be only fair for them to sign their name.

I have a lot of queries on file to refer to if I had any time to help the boys, but as they are all signed by fictitious names I will not waste my time, as it may only be some one that is trying to get up an agrument. Wm. H. Cunningham.

Albany, N. Y., July 23, 1902.

DESIRES GUTTER FOR CORNICE.

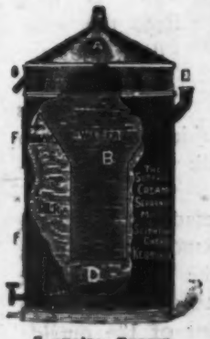
To The American Artisan.

I have a wood store cornice about 14 inches wide and it is lined with tin, but it has got no gutter on it, and the water dropping down has been a source of trouble to me for a couple of years. It is my own building, and I would like to ask some ideas and suggestions from readers of your valuable paper as to which gutter would make a nice, neat gutter, about 22 feet long. I want to solder it to the tin.

Newark, N. J., July 18, 1902. A. L. R.

SURPRISE CREAM SEPARATOR.

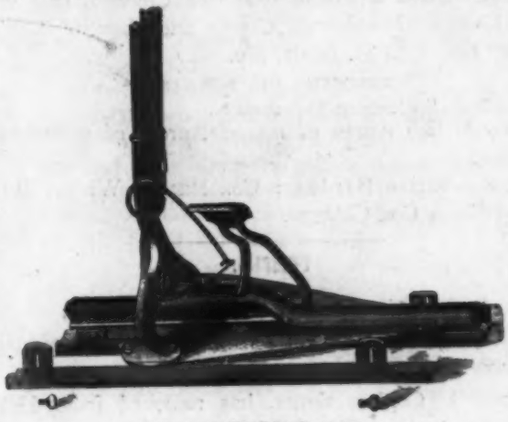
The Seither & Cherry Co., Keokuk, Iowa, are manufacturers of the Surprise cream separator shown in the accompanying cut. These separators are made of the best heavy tin plate and are very durable. Every separator is guaranteed. The manufacturers point out that in this separator the milk is not mixed with the water and that skimmed milk not diluted with water is worth money to the farmer. This firm would be pleased to correspond with the trade concerning prices and agency. When writing them kindly add: "Saw it in The American Artisan."



Surprise Cream Separator.

KENNEY'S DOUBLE SEAMER.

The accompanying cut shows Kenney's patent double seamer for standing lock tin roofing, manufactured by the Dwight Slate Machine Co., Hartford, Conn. This machine consists of two clamps, which



Kenney's Double Seamer.

are operated by long levers or handles. A double, right angular-faced folding bar operated by a foot lever is hinged to one of these clamps. The machine is worked by opening the levers, placing clamps over

the standing edge, with vertical face of folding bar to the work, then closing and holding firmly.

These machines are adjustable to different widths of seam and qualities of tin. All parts are made to gauge so that a duplicate part can be furnished at any time.

DAIRY MAID CREAMER.

The accompanying cut shows the Dairy Maid creamer manufactured by the Lourie Co., Keokuk, Ia. The outside or water reservoir in this creamer is made of heavy galvanized iron and thoroughly painted outside. A faucet is placed near the bottom and is used for the withdrawal of the water. A second faucet is placed in the front end of the outside reservoir into which the outlet tube from the milk reservoir is inserted.

Dairy Maid Creamer.

The inside or milk reservoir is made of heavy tin of a narrow oblong shape, with rounded ends and a V-shaped bottom sloping toward the front end. At the lowest point a brass tube is fastened and made to fit inside the faucet placed in front of the outside reservoir. The milk is on the inside and is not exposed to hot drafts. There is no lifting to be done, as both water and milk can be drawn off through faucets.

NOTES AND QUERIES.

SCRAP IRON.

From Howard Hardware Co., Harris, Ia.

Would like address of a few dealers in scrap iron?

Ans. Black & Pollak Iron Co., Chicago, Ill.; W. H. Rogers, Bridgeport, Conn., and the St. Louis Scrap Iron Co., St. Louis, Mo.

KEROSENE OIL BURNERS.

From R. L. Spellerberg, Dubuque, Ia.

Would like names of manufacturers of a fuel oil burner?

Ans.—Racine Hardware Co., Racine, Wis.; Union Drop Forge Co., Chicago.

ITEMS.

A. B. Allen is a new Fargo, N. Dak., tinner.

W. R. Peet, a Preston (Minn.) tinner, is reported to have sold out.

Paul A. Conlon, tinner, has removed from Holgate, O., to Cass City, Mich.

It is said that the American Can Co. will erect a mill near Maywood, Ill., and will manufacture its own tinplate.

The Atlanta Rolling Mill & Tin Plate Co., Atlanta, Ind., are erecting a tin plate plant which will contain 6 hot mills and 4 cold mills.

R. R. Mabie, Geo. Baum and O. A. Samuel are the incorporators of the R. R. Mabie Roofing Co., New York City, incorporated with a capital stock of $25,000.

The Jackson Iron & Tin Plate Co., Clarksburg, W. Va., have started their plant, which consists of 8 tin mills and 6 heating furnaces. Its daily output of tin plate will amount to about 70 tons.

B. T. Wood, 121 Broadway, Berlin, Wis., carries a complete line of skylights, galvanized iron cornices, window caps, finials, metallic awnings, dairy supplies, tanks, bottom hoops for milk cans, etc.

The John Dunlap Co. are erecting a substantial tinware factory at Carnegie, Pa. This will consist of two three-story buildings, one 70x250 feet in dimensions, and the other 40x250 feet in dimensions.

E. H. Little, A. W. Little and E. Little are the incorporators of the Edward H. Little Co. of New York incorporated with a capital stock of $2,000 for the manufacture of stamped galvanized ware.

It is said that a new tin plate company is being organized by John F. Budke. They have already purchased the old plant of the American Tin Plate Co., at Canonsburg, Pa., and will install 8 tin mills in same.

The Amalgamated Association of Iron, Steel and Tin Plate Workers at Lisbon, Ohio, have voted in favor of accepting the American Tin Plate Company's proposition of reduced wages in order to accept a big contract from the Standard Oil Company.

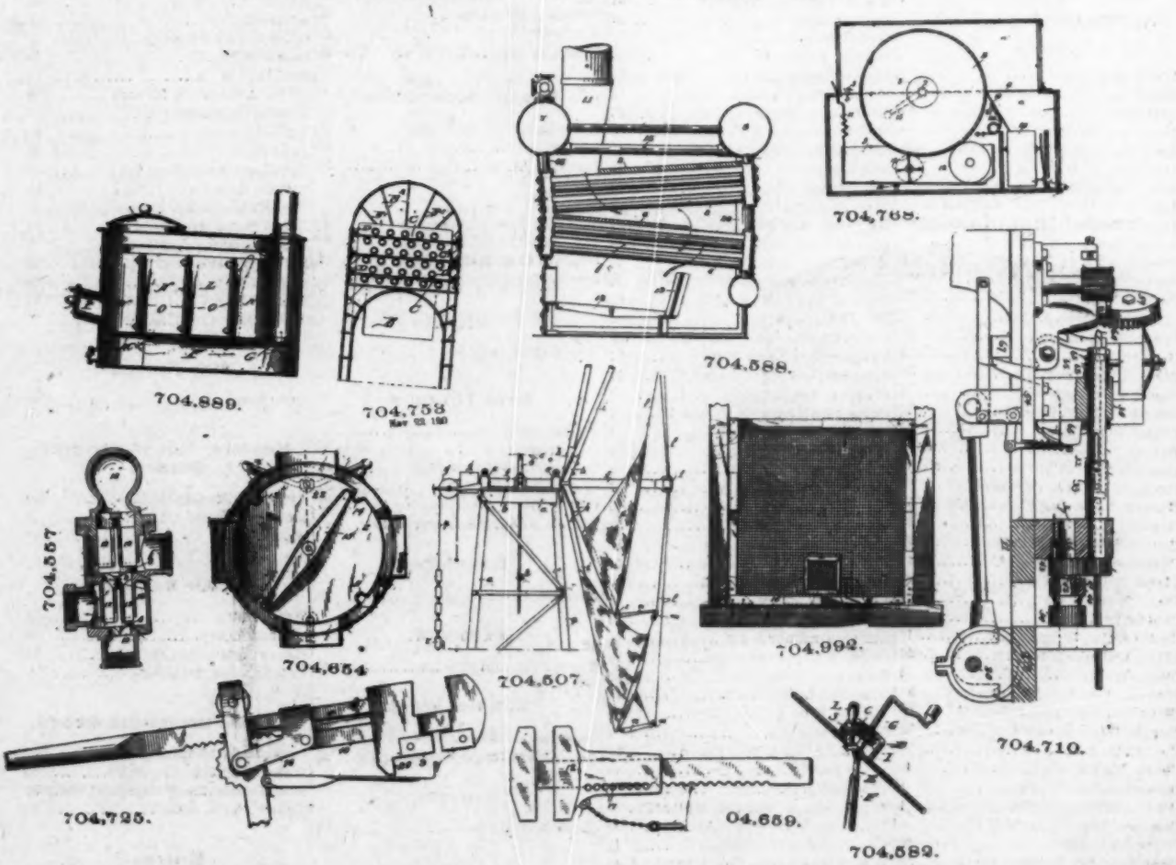
The La Crosse Steel Roofing and Corrugating Co., La Crosse, Wis., are manufacturers of a complete line of steel roofing, all gauges, painted and galvanized. They are also manufacturers of eaves trough, conductor pipe, elbows, miters, hangers and cut-offs.

THE HARLEV BURGLAR-PROOF SASH LOCK.

The Harlev Burglar-Proof Ventilating Sash Lock Co., 92 La Salle street, Chicago, are manufacturers of the Harlev burglar-proof ventilating sash lock shown in the accompanying illustration.

This device consists essentially of a ratchet fastened along the side of the upper sash and a locking pin attached to the meeting rail of the lower sash. The only other mechanism about the lock is a spiral spring of piano wire, which holds the locking pin in place. The simplicity of the lock insures both its durability and its efficiency. The ratchet pin and the case covering the latter are finished in electroplated copper. The screws that fasten the ratchet are set at right angles to the line of movement of the sash, and thus maintain a firmness to the lock.

NEW PATENTS.



704,725.—Combined wrench and tire-setter. Madison Whiteside, Carrier, Okla. Filed April 21, 1902. Serial No. 103,966.

704,582.—Wrench. George Schaub, Lake Beulah, Wis. Filed.

704,992.—Window screen. Claude B. Warner, Avon, Ill.

704,557.—Check valve. William R. Michener, Oakland, Cal.

704,889.—Heating stove. Charles Matthews, Columbia, Mo.

704,768.—Refrigerator, freezer and churn. Samuel Sweeney, San Francisco, Cal. Filed Sept. 9, 1901. Serial No. 74,782.

704,659.—Wrench. Walter Neilson, Bridgeport, Conn.

704,710.—Barbed wire machine. Edw. F. Shellaberger, DeKalb, Ill. Filed March 27, 1902. Serial No. 100,322. (No model.)

704,507.—Windmill. Raphael Bruneau, Oran, France. Filed.

704,654.—Valve. Samuel B. Moffit and Charles O. Weisenburger, Sharon, Pa. Filed April 24, 1902. Serial No. 104,553. (No model.)

704,753.—Steam boiler. Gideon D. Miller, Tub, Pa. Filed.

704,588.—Steam boiler. John P. Simmons, San Francisco, Cal.

HE GOT THE TESTIMONIAL.

An inventor, having produced a wonderful hair invigorating fluid, sent a case of bottles to a bald editor, with a request for a testimonial. He got it in these terms:

A little applied to the inkstand has given it a coat of bristles, making a splendid penwiper at a small cost. We applied the lather to a two-penny nail, and the nail is now the handsomest shaving brush you ever saw, with beautiful, soft hair growing from the end of it some two or three inches in length.

Applied to doorsteps, it does away with the use of a mat; applied to the floor, it will cause to grow therefrom hair sufficient for a brussels carpet. A little weak lather sprinkled over a shed makes it impervious to the wind, rain or cold.

It is good to put inside children's cradles, sprinkle on the roadside or anywhere that luxurious grass is wanted for use or ornament. It produces the effect in ten minutes.—Ex.

ADVICE THAT NEEDS REVISING.

"Put not your trust in riches," said the clerical looking man in the rusty coat.

"I don't," replied the prosperous looking individual, "I put my riches in trusts."—Ex.

PING-PONG HABIT.

Mrs. Handout—Will you saw some wood?

Frayed Fagin—Sorry, mum, but I've got the ping-pong wrist and me physician says I need absolute rest. —Ex.

FOR THE LAND'S SAKE.

"Will you share my humble lot?" begged the suitor.

"Yes, if there's a cottage on it," answered the crafty maid.—Philadelphia Record.

ADVERTISERS' INDEX.

ALPHABETICAL LIST.

Adams & Elting Co. 50
Aitchison, The Robert Perf'd Metal Co. 55
American Radiator Co. 2-9
American Tinplate Co. 47
Atkins, E. C. & Co. 60
Atlas Bolt & Screw Co. 1
Atlas Mfg. Co. 1
Auld & Conger Co. 48
Ayling Bros. 52
Barnett, G. & H. Co. 1
Beckwith, Estate of P. D. 18
Berger Bros. Co. 54
Bergstrom Bros. & Co. 13
Berger Mfg. Co. 49
Bertsch & Co. 50
Bicknell Hardware Co. 56
Boynton Furnace Co. 2
Brammer, H. F. Mfg. Co. 56
Brand Stove Co. 10
Brauer, A. G. 53
Bridgeport Crucible Co. 51
Buckeye Paint & Varnish Co. 50
Burgess-Soldering Furnace Co. 51
Burton, W. J. & Co. 49
Canton Steel Roofing Co. 48
Champion Steel Range Co. 12
Clark, Geo. M. & Co. 7
Clark Novelty Co. 2
Caldwell Mfg. Co. 60
Castle & Co., Wilmot 17
Clark, Quien & Morse 56
Clark, W. A. 14
Clayton, Lambert Mfg. Co. 51
Cleveland Stamping & Tool Co. 50
Clipper Lawn Mower Co. 57
Coe, E. G. & Co. 54
Cohen, Montague 41
Columbus Bolt Works 1
Columbus Stove Works 14
Connors, Wm. Paint Mfg. Co. 1
Cooney & Geiger 60
Cope, Geo. W. Pattern Works 53
Cortright Metal Roofing Co. 59
Cullen, Orlan Clyde 44
Denning Fence Works 44
Detroit Heating & Lighting Co. 11
Disston, Henry & Sons 55
Dixon, Jos. Crucible Co. 44
Dreis, Andrews & Krump 51
Dust, Wm. T. Co. 53
Dwight Slate Machine Co. 47
Eiler, J. H. & Co. 48
Enterprise Mfg. Co. of Pa. 55
Evans Stamping & Plating Co. 52
Fanner Mfg. Co. 52
Farwell, Ozmun, Kirk & Co. 57
Ferrosteel Co. 16
Forbes Chocolate Co. 57
Forest City Foundry & Mfg. Co. 12
Forest City Paint & Varnish Co. 50
Fox Cutlery Co. 54
Friedley & Voshardt 45
Galesburg Cornice Works 47
Garry Iron & Steel Roofing Co. 46
Globe Ventilator Co. 60
Gobeille Pattern Works 53
Gray, G. L. 48
Harley Burglar Proof Ventilating Sash Lock Co. 59
Hart & Cooley Co. 16
Henry & Scheible Co. 16
Hess Snyder & Co. 8
Helios Upton Co. 51
Hoffman, Geo. W. 51
Home Industrial School 44
Howes, S. M., Co. 53
Huffman, Theo. P. & Co. 60
Hughes, C. S. & Co. 54
Illinois Roofing & Supply Co. 49
Independent Register Co. 1
Iwan Bros. 59
Johnson, E. J. & Co. 1
Joliet Stove Works 4
Jones, J. H. 2
Kelsey Heating Co. 9
Kewanee Boiler Co. 2
Kimball Bros. Co. 59
LaCrosse Steel Roofing Co. 47
Lee-Glass-Andreesen Hdw. Co. 58
Lourie Co. 56
Lufkin Rule Co. 59
Lugibihl, A. D. 56
March, Brownback Stove Co. 14
Matthews H. A., Mfg. Co. 53
McClure & Co. 60
Merchant & Co. 48
Merrill, B. G. 56
Meyer Furnace Co. 13
M'ch. Safety Furnace Pipe Co. 15
Milwaukee Corrugating Co. 46
Monroe Furnace & Foundry Co. 15
Mueller, L. J. Furnace Co. 13
Nat. Enameling & Stamping Co. 58
Neill Stove Mfg. Co. 17
New York Central Iron Works 15
Nicholson File Co. 1
Nickel Plate Stove Polish Co. 11
North Bros. Mfg. Co. 54
Obermayer, S. & Co. 15
Osborn, The J. M. & L. A. Co. 60
Perkins, J. L. & Co. 1
Peters Cartridge Co. 57
Philadelphia Lawn Mower Co. 57
Pittsburgh Stove & Range Co. 10
Plume & Atwood Mfg. Co. 2
Portsmouth Stove & Range Co. 8
Reading Stove Works 6
Richmond Co. 16
Ringen Stove Co. 3
Rochester Radiator Co. 17
Safety Furnace Pipe Co. 15
Sayre Stamping Co. 53
Schick, J. K. 59
Schrayer's, M. Sons & Co. 56
Schwab, R. & J. Sons Co. 10
Seither & Cherry Co. 56
Smith, Chas. Co. 16
Smith, Bradner & Co. 50
Smith & Hemenway Co. 55
Sperry, D. R. & Co. 59
Standard Lighting Co. 12
Stanley Rule & Level Co. 55
Stengel Mfg. Co. 54
Stevens Arms & Tool Co. 60
Sykes Steel Roofing Co. 46
Tower Mfg. Co. 57
Trane, Jas. A., Vacuum Heater Co. 17
Twin City Wire Fence Co. 50
Van Leyen & Hensler 44
Weber Gas & Gasoline Engine Co 44
Weller Pattern Co. 53
Welling Mfg. Co. 59
Willard, Wm. G. 11
Willis Mfg. Co. 48
White, Thos., Stove Co. 5
Wood, B. T. 47
Wynn, Lewis D. 52

CLASSIFIED LIST.

Architectural Sheet Metal Work.

Berger Mfg. Co. 49
Canton Steel Roofing Co. 48
Friedley & Voshardt 45
Willis Mfg. Co. 48
Wood, B. T. 47

Bicycles.

Wood, B. T. 47

Building Paper.

Smith, Bradner & Co. 50

Ceilings—Steel.

Berger Mfg. Co. 49
Burton, W. J. & Co. 49
Canton Steel Roofing Co. 48
Eiler, J. H. & Co. 48
Friedley & Voshardt 45
Garry Iron Roofing Co. 46
Illinois Roofing & Supply Co. 49

Cement.

Connors, Wm. Paint Mfg. Co. 1

Chimney Tops.

Berger Mfg. Co. 49
Iwan Bros. 59

Cornices.

Berger Mfg. Co. 49
Burton, W. J. & Co. 49
Canton Steel Roofing Co. 48
Galesburg Cornice Works 46
Garry Iron & Steel Roofing Co. 46
Merchant & Co. 48
Milwaukee Corrugating Co. 46
Wood, B. T. 47

Cornice Ornaments and Statuary.

Friedley & Voshardt 45
Willis Mfg. Co. 48
Wood, B. T. 47

Cream Separators.

Galesburg Cornice Works 47
Lourie & Co. 56
Lugibile, A. D. 56

Cutlery.

Fox Cutlery Co. 54
Hughes, C. S. & Co. 54
Smith & Hemenway Co. 55

Drills.

North Bros. Mfg. Co. 54

Eave Troughs.

Berger Bros. Co. 54
Berger Mfg. Co. 49
Canton Steel Roofing Co. 48
Clark, Quien & Morse 56
Garry Iron & Steel Roofing Co. 46
Illinois Roofing & Supply Co. 49

Elevators.

Kimball Bros. 59

Excelsior.

Theo. P. Huffman & Co. 60

Enamel Ware.

Cleveland Stamping & Tool Co. 50
Nat. Enameling & Stamping Co. 58

Faucets.

Clark Novelty Co. 2

Fencing.

Denning Fence Works 44

Files.

Barnett, G. & H. Co. 1
Disston, Henry & Sons 55
Nicholson File Co. 1

Flue Stoppers.

Welling Mfg. Co. 59
Schick, J. K. 59

Foundry Supplies.

Obermayer, S. & Co. 15

Furnace Cement.

Connors, Wm. Paint Mfg. Co. 1

Furnace Pipes.

Michigan Safety Furnace Pipe Co. 15
Safety Furnace Pipe Co. 15

Furnaces—Tinners.

Burgess Soldering Furnace Co. 51
Clayton, Lambert & Co. 51

Furnaces—Warm Air.

Bergstrom Bros. & Co. 13
Boynton Furnace Co. 2
Brand Stove Co. 9
Clark, W. A. 14
Forest City Foundry & Mfg. Co. 12
Kelsey Heating Co. 9
Meyer Furnace Co. 13
Monroe Furnace & Foundry Co. 15
Mueller, L. J. Furnace Co. 13
Schwab, R. J. Sons Co. 10
Smith, Chas. Co. 16

Gas and Gasoline Engines.

Detroit Heating & Lighting Co. 11
Weber Gas & Gasoline Engine Co 44

Hardware Specialties.

Atkins, E. C. & Co. 60
Atlas Mfg. Co. 1
Atlas Bolt & Screw Co. 1
Caldwell Mfg. Co. 60
Coe, E. J. & Co. 54
Dreis, Andrews & Krump 51
Forbes Chocolate Co. 57
Helio's Upton Co. 51
Iwan Bros. 59
Lee-Glass-Andreesen Co. 58
Lufkin Rule Co. 59
Nat. Enameling & Stamping Co. 58
North Bros. Mfg. Co. 54
Plume & Atwood Mfg. Co. 2
Smith & Hemenway Co. 55
Sperry, D. R. Co. 59
Stengel Mfg. Co. 54
Tower Mfg. Co. 57

Hay Knives.

Iwan Bros. 59

Heaters—Hot Water and Steam.

American Radiator Co. 2-9
Kewanee Boiler Co. 2
Smith, Chas. Co. 16

Hot Air Registers.

Fanner Mfg. Co. 52
Hart & Cooley 16
Henry & Scheible Co. 16
Independent Register Co. 1

House-Furnishing Goods.

Cleveland Stamping & Tool Co. 50
Enterprise Mfg. Co. of Pa. 55
Nat. Enameling & Stamping Co. 58
Sperry, D. R. & Co. 59

Knives.

Hughes, C. S. & Co. 54
Smith & Hemenway Co. 55

Lawn Mowers.

Clipper Lawn Mower Co. 57
Philadelphia Lawn Mower Co. 57

Lawn Sprinklers.

Smith & Hemenway Co. 55

Metal Shingles.

Burton, W. J. & Co. 49
Cortright Metal Roofing Co. 59
Garry Iron & Steel Roofing Co. 46

Metals—Perforated.

Aitchison, The Robert Perf'd Metal Co. 55

Metallic Shutters.

Berger Mfg. Co. 49
Burton W. J. & Co. 49
Canton Steel Roofing Co. 48
Garry Iron & Steel Roofing Co. 46

Mitre Boxes.

Smith & Hemenway Co. 5

Nail Pullers.

Smith & Hemenway Co. 55

Oil Heaters.

Standard Lighting Co. 12

Oven Thermometers.

Evans Stamping & Plating Co. 52
Helios-Upton Co. 51

Paints.

Adams & Elting Co..... 50
Buckeye Paint & Varnish Co..... 50
Canton Steel Roofing Co..... 48
Dixon, Jos. Crucible Co..... 44
Forest City Paint & Varnish Co.. 50

Paper.

Smith, Bradner & Co..... 50

Patents.

Cullen, Orlan Clyde..... 44

Plyers and Nippers.

Smith & Hemenway Co..... 55

Polish.

Buckeye Paint & Varnish Co..... 50
Hoffman, Geo. W..... 51

Post Hole Augers and Diggers.

Iwan Bros..... 50

Radiators.

American Radiator Co.....2-9
Castle, Wilmot & Co..... 17
Rochester Radiator Co..... 17

Razors.

Smith & Hemenway Co..... 55

Registers.

Ferrosteel Co..... 16

Roofing.

Auld & Conger Co..... 48
Berger Mfg. Co..... 49
Canton Steel Roofing Co 48
Cortright Metal Roofing Co..... 50
Eller, J. H. & Co..... 48
Garry Iron & Steel Co..... 46
LaCrosse Steel Roofing Co..... 47
Merchant & Co..... 48
Osborn, The J. M. & L. A. Co..... 60
Perkins, J. L. & Co..... 1
Sykes Steel Roofing Co..... 46

Sash Locks.

Harlev Burglar Proof Ventilating Sash Lock Co..... 59

Saws.

Atkins, E. C. & Co..... 60
Disston, Henry & Sons..... 55

Saw Sets

Disston, Henry & Sons..... 55
Smith & Hemenway Co..... 55

Screw Drivers.

North Bros. Mfg. Co..... 54
Smith & Hemenway Co..... 55

Shears and Punches.

Bertsch & Co..... 50

Skylights.

Burton, W. J. & Co..... 49
Canton Steel Roofing Co..... 48
Friedley & Voshardt..... 45
Garry Iron & Steel Co..... 46
Gray, G. L..... 48
Jones, J. H..... 2
Wood, B. T..... 47

Slate Machines.

Dwight Slate Machine Co..... 47

Sporting Goods.

Peters Cartridge Co..... 57
Stevens, J. Arms & Tool Co..... 60

Stove Bolts.

Atlas Bolt & Screw Co..... 1

Stove Casters.

Independent Register Co..... 1
Fanner Mfg. Co..... 52

Stove Lining.

Connors, Wm. Paint Mfg. Co..... 1
Bridgeport Crucible Co..... 51

Stove Patterns.

Cope, Geo. W. Pattern Works..... 53
Gobeille Pattern Works..... 53
Weller Pattern Co..... 53

Stove Pipe Elbow Patterns

Gray, G. L..... 48

Stove Polish.

Ayling Bros..... 52
Dixon, Jos. Crucible Co..... 44
Nickel Plate Stove Polish Co..... 11
Wynn, Lewis D..... 52

Stove Repairs.

Brauer, A. G..... 53
Dust, Wm. T. Co..... 53

Stoves and Ranges.

Beckwith, Estate of P. D..... 18
Brand Stove Co..... 10
Champion Steel Range Co..... 12
Clark, Geo. M. & Co..... 7
Columbus Stove Works..... 14
Hess Snyder & Co 8
Joliet Stove Works..... 4
March, Brownback Stove Co..... 14
Neill Stove Mfg. Co 13
New York Central Iron Works..... 15
Pittsburgh Stove & Range Co..... 10
Portsmouth Stove & Range Co..... 8
Reading Stove Works..... 6
Richmond Stove Co..... 16
Ringen Stove Co..... 3
White, Thos. Stove Co..... 5
Willard, Wm. G..... 11

Stove Trimmings.

Atlas Bolt & Screw Co..... 1
Columbus Bolt Wks..... 1
Fanner Mfg. Co..... 52
Howes, S. M. Co..... 53
Richmond Co..... 16
Sayre Stamping Co..... 53

Tacks.

Tower Mfg. Co..... 57

Tape Measures.

Lufkin Rule Co..... 59

Tinners' Tools and Supplies.

Berger Bros. Co..... 49
Bicknell Hardware Co..... 56
Lufkin Rule Co..... 59
Merrill, B. J..... 56
Perkins, J. L. & Co..... 1
Stanley Rule & Level Co..... 55

Tinplate.

American Tinplate Co..... 47
Illinois Roofing & Supply Co..... 49
McClure & Co..... 60
Merchant & Co..... 48
Osborn, The J. M. & L. A. Co..... 60

Tinware.

Cooney & Geiger..... 60
Nat. Enameling & Stamping Co..... 58
Schrayer's, M. Sons & Co..... 56

Vacuum Heaters

Trane, Jas. A. Vacuum Heater Co. 17

Ventilators.

Berger Bros. Co..... 54
Berger Mfg. Co..... 49
Burton, W. J. & Co..... 49
Garry Iron & Steel Roofing Co..... 46
Globe Ventilator Co..... 60
Iwan Bros..... 50
Merchant & Co 48

Washing Machines.

Brammer, H. F. Mfg. Co..... 56
Clark, Quien & Morse..... 56

Wire Fences.

Denning Fence Works..... 44
Twin City Wire Fence Co..... 50

KNIGHTS PYTHIAS BIENNIAL MEETING.

For this gathering in San Francisco in August next excursion tickets will be sold via the Chicago, Milwaukee & St. Paul Ry. from Chicago to San Francisco or Los Angeles for $50 for the round trip, with final return limit September 30.

The "Chicago, Milwaukee & St. Paul" railway is the Short Line between Chicago and Omaha. Two through trains daily in each direction, with the best Sleeping Car and Dining Car Service, and all regular travelers know and appreciate the merits of the Chicago, Milwaukee & St. Paul Railway's Short Line between the East and the West.

Time tables, maps and information furnished on application to F. A. Miller, General Passenger Agent, Chicago.

EXCURSIONS TO ATLANTIC CITY, NEW YORK CITY AND MONTREAL, VIA THE WABASH R. R.

Advertised for July 31, Aug. 7 and 14, have been abandoned.

CANCELLATION OF SPECIAL TRIPS.

The Special Daylight trips of the Cleveland and Buffalo Transit Co., advertised to leave Cleveland 8:00 a. m. and Buffalo 9:00 a. m. Saturdays during July and August, are hereby cancelled.

Until December first, steamers will leave Cleveland daily, 8:00 p. m., Central Standard time. Buffalo daily, 9:00 p. m., Eastern Standard time.

FOREIGN TRADE REQUIREMENTS.

This is the title of an interesting book published annually by Lewis Scribner & Co., 125 East Twenty-third street, New York. It contains complete information concerning the commercial countries of the world as to trade conditions, traveling salesmen, agencies and advertising, credit customs, commercial trade-marks and patent laws, transportation facilities, principal cities, postal regulations, coins and currencies, weights and measures and cable rates.

The publishers of this work have been very successful in bringing together in a single reference volume the information most essential to the conduct and extension of foreign trade.

GOOD AT A PINCH.

Ethel—Would you consider Percy Monckton a good catch?

Madge—Certainly, if all the others got away!—Ex.

A MERE NOTHING.

Nell—I saw you at the remnant counter yesterday.

Belle—Yes; I was buying material for a bathing suit.—Philadelphia Record.

Trade Report.

CHICAGO PIG IRON MARKET.

The demand for pig iron is decidedly strong.

Buyers are very anxious and are seeking sellers with rare avidity.

The salesmen of various pig iron firms are having an easy time of it.

A large number of furnaces are sold up to July 1, 1903.

The aggregate tonnage sold during the week has not been anything remarkable.

The premium for spot has taken an acute upward turn and now ranges from $3 up to $5.

This is due to a stronger demand for spot than that of last week.

Now that the Southern coal miners' strike is finished shipments from that region show an increase.

BARS.

The tone of the bar iron market is decidedly stronger, owing to the advance to 1.95c made by the leading producers. All other sellers have not advanced to the same level and hence the future quotation is not without some question. There were heavy transactions in bars just previous to this rise, the buying being widely distributed and including deliveries mainly for the first half of 1903. An effort has been made within the past two weeks to combine six western bar producers into one company. So far the plans have not succeeded but efforts have not been wholly abandoned. We quote Chicago delivery, Bessemer steel, 1.75c to 1.85c; angles, less than 3x3, 1.85c; iron, 1.85c to 1.95c; hoops, 2.15c. Prices out of store: steel, 2c to 2.10c; iron, 2.20c to 2.25c; hoops, 2.40c to 2.45c; angles, 2.50c to 2.60c.

SHEETS.

A moderately good demand for sheets is reported. Concessions by some of the smaller mills are reported but the general list is not reduced. We quote No. 27 black, mill shipments, Chicago delivery, 3.15c to 3.25c; galvanized, 4.40c to 4.50c; out of store, No. 27 black, 3.35c to 3.50c; galvanized, 4.60c to 4.75c.

STRUCTURAL MATERIALS.

Something like 20,000 tons has been sold during the past week and there are inquiries for nearly the same amount now in the market. Bridge builders have been especially active in providing for their future wants and car builders also have been good buyers. All this tonnage is for 1903 shipment. Store trade shows no decrease. We quote mill prices as follows: Beams, 15 inches and under, 1.75c; 18 inches and over, 1.85c; structural angles, 3x3 to 6x6, 1.85c; angles, channels and tees, smaller than 3 inches, 1.85c base; plates, 1.75c. Prices on lots from store are based on the necessities of buyers and acocrding to the size of order. Store prices vary from 2½ to 4 cents a pound.

BILLETS.

The market shows no weakening here. The transactions of the past week have been restricted mainly to carload business, which is quoted at about $32.50, for foreign Bessemer product. Representatives of German makers are said to have been recently trying to negotiate for billets directly with consumers, though it can not be learned with what success.

RAILS AND TRACK SUPPLIES.

A new spike mill is needed in the west to take care of business offered and the erection of one at Joliet is under consideration. Track supplies of all kinds are sharing in the activity displayed in rails. The inquiry for the latter continues. There have been large purchases during the week and the buying has now attained such proportions that the eastern mills are receiving an increased percentage of inquiries. The local mills by common report are said to be sold up to October 1, 1903. Inasmuch as some of these purchases are for delivery during the last quarter of the year the mills still have open some capacity for shipment in July. This week a large inquiry for requirements a little earlier had to be turned over to eastern mills for consideration. Prices are without change. We quote standard rails $28; second quality, $27; light rails, 45 pounds, $34 to $35; 12 pounds, $40 to $41, with regular differentials for intermediate sizes; out of store, $45 to $50; splice bars, 2.25c; spikes, carload lots, 2.45c; to 2.55c; track bolts, 3½x 3¼, with square nuts, 2.85c per 100 pounds; with hexagon nuts, $3, with usual differentials for other sizes.

MERCHANT STEEL.

The mills are turning down some business every week. The inquiry is not large, however, for all large consumers are covered until well into next year. We quote mill shipments, Chicago delivery, as follows: Smooth finished tire steel, 1.95c to 2c; open-hearth spring steel, 2.65c to 2.75c; sleigh shoe, 1.75c to 1.80c, flat sizes; concave and convex, 2c; out of store, 2.15c; cutter shoe, 2.40c to 2.60c; machinery steel, 2.15c to 2.25c, base; plow steel, 2.50c and upwards, according to quality; toe calk, 2.25c to 2.35c; out of stock, 3c to 3.10c; ordinary tool steel, 6c to 7c; specials, 13c and upwards; less than carload lots, 5 per cent to 10 per cent higher.

SCRAP IRON.

Scrap iron is irregular and very high, under the strong position of new iron: No. 1 wrought, 95c@ $1.10; No. 1 cast, 95c@$1.15; wrought turnings and borings, 60@80c; cast, 60@80c; soft steel, 90c@$1.20; old iron rails, $27@28 per ton, Boston; old steel rails, $24@25.

BLACKSMITHS' MATERIALS.

Blacksmiths' materials continue very firm: Horseshoes, $4.15; horseshoe nails, No. 8, 14c; calking steel, 3@3¼c; toe calks, dull, 5@5½c; sharp, 6@6½c; rubber horseshoe pads, $1.10@1.40 per pair; bar iron and steel, 2.20@2.40c; Midvale steel, 8c, 12c and 16c for B, Bs and sBs brands; self-hardening steel, 40@45c

INGOT COPPER.

Ingot copper continues dull: Lake round lots, 11.95@12.05c; electrolytic, 11.95@12c; casting, 11@11.95c. London was cabled quiet: Standard copper, closing spot, £52 17s 6d; sales, 250 tons; futures, £53; sales, 150 tons.

MANUFACTURED COPPER.

Manufactured copper is unchanged at 17@18c for both sheets and bars.

TIN.

Tin is reported easier: Spot, New York, 28.80@29c; futures, 28.40@28.60c; Boston and jobbing, ¼@½c more. London was last cabled easy at £128 5s for spot and £125 10s for futures.

TIN PLATES.

Tin plates are unchanged: Melyn, $6.50@7; Alloway, $5.75@6.25; coke, $4.87½@6.50; terms, $4@4.50; additional X, $1.50@1.75 more.

LEAD.

Lead is quiet and a little easier, though St. Louis is firmer: Round lots, New York, 4.12½c; Boston and jobbing, ¼@½c more. London, £11 2s 6d; St. Louis firmer, 4@4.05c. Manufactured: Pipe, 6½c; sheet, 7¼c; tin pipe, 50c; tin-lined pipe, 12½c; old lead, in exchange, 3¾c; tea, 3¼c.

SPELTER.

Spelter continues firm: Round lots, New York, 5.37½c; jobbing and Boston, ¼@½c more; sheet zinc, cask lots, 6½@6¾c; small lots, 7¼@7½c. St Louis market is quoted at 5@5.05c; London, £19.

ANTIMONY.

Antimony is in quiet demand and unchanged: Cookson's, 9.75@10c; Hallett's, 8¼@8½c; United States Star and other brands, 8@8.50c.

NICKEL.

Nickel is firm, with the price unchanged at 50@60c.

PLATINUM.

Platinum is in good request, but a little easier at $18.50@19 per oz, New York; here, small lots, $1@2 more.

QUICKSILVER.

The New York price of quicksilver continues steady at about $48 per flask, for large lots; small orders more; San Francisco, $45.50@46.50; domestic orders; export, $43; London, £8 15s.

ALUMINUM.

Aluminum is quiet and unchanged at 33@37c for ingots, No. 1, per lb; No. 2, 31@34c; rolled sheets, 40c and up.

WINDOW GLASS.

Window glass is unchanged: Single, 89 and 5 per cent off; double, 89 and 10 per cent off; plate, 80 per cent off.

The glass situation is particularly interesting from the fact that the factories are all shut down, which is not unusual during hot weather, but glass is scarce and very firm in most markets, except this, where there is a large amount of imported glass. But the most interesting feature is that a machine has at last been invented for blowing glass, and that this machine, with three men, at fair wages, will take the place of 15 or 16 of the old arbitrary glass blowers at exorbitant wages. It is understood that the American Window Glass Company has control of this machine, and that it will not only blow glass in this country, but in Belgium as well, where it is obtaining control of the glass making.

WIRE NAILS.

Although there has been no particular call for wire nails the price has been well maintained. Single carload lots are quoted at $2.20, and small lots are $2.25@2.30.

CUT NAILS.

There is only a fair demand for cut nails. The price continues at the old figure of $2.30 for small lots.

BARB WIRE.

The orders for barb wire are naturally few and far between, in accordance with the season of the year. Galvanized is quoted at $3.00 for carload lots and $3.10 for small lots from store and painted is $2.80 for carload lots and $2.85 from store.

PLAIN WIRE.

Plain wire is unchanged, small lots being quoted at $2.20.

ROPE.

Rope is slack. Manila base price is 12½c to 13c, and Sisal base price is 9¼c to 9½c.

WHITE LEAD IN OIL.

White lead in oil is 6c in lots of 500 lbs. and over, and 6½c per lb. in smaller lots.

LINSEED OIL.

The demand for linseed oil is limited to the requirements of the hour. Prices remain as before. City raw is 67c to 68c and Out of Town raw is 66c to 67c per gallon.

SPIRITS TURPENTINE.

The turpentine market is stronger. Southerns are 46½c to 47c, and machine made barrels are 47c to 47½c per gallon.

Quotations.

METALS.

FIRST QUALITY BRIGHT PLATES.

		Per Box.
IC	14x14	$11 25
IC	14x20	7 50
IX	14x20	9 00
IXX	14x20	10 50
IXXX	14x20	12 00
IXXXX	14x20	13 50
IC	20x28	15 00
IX	20x28	18 00
IXX	20x28	21 00

COKE PLATES.

Cokes, 180 lbs	IC	20x28	9 50
Cokes, 200 lbs	IC	20x28	9 75
Cokes, 216 lbs	IC	20x28	10 25
Cokes, 216 lbs	IX	20x28	11 75

PIG IRON.

Lake Sup. Charcoal	$23 50@$24 00
Local Coke Fdy No. 1	22 50@ 23 00
Local Coke Fdy No. 2	21 50@ 22 00
Local Coke Fdy No. 3	20 50@ 21 00
Local Scotch Fdy No. 1	23 00@ 23 50
Local Scotch Fdy No. 2	22 50@ 23 00
Southern Coke No. 1	22 65@ 23 15
Southern Coke No. 2	22 15@ 22 40
Southern Coke No. 3	21 65@ 21 90
Southern Coke No. 4	21 15@ 21 40
Southern No. 1 Soft	22 50@ 23 00
Southern No. 2 Soft	21 50@ 22 00
Southern Gray Forge	20 15@ 20 65
Southern Silveries	22 50@ 23 00
Jackson Co. Silveries	25 60@ 26 60
Ohio Strong Softeners	25 10@ 25 60
Alabama Car Wheel	25 65@ 25 90
Malleable Bessemer	22 50@ 23 00

BLACK SHEET STEEL.

No. 16 per 100 lbs.	$3 00
No. 18-20 per 100 lbs.	3 10
No. 22-24 per 100 lbs.	3 20
No. 25-26 per 100 lbs.	3 30
No. 27 per 100 lbs.	3 40
No. 28 per 100 lbs.	3 50
No. 29 per 100 lbs.	3 65

SMOOTH STEEL.

Wood's Smooth	No. 15-17	3 20
" "	No. 18	3 30
" "	No. 20	3 40
" "	No. 22-24	3 50
" "	No. 25-26	3 55
" "	No. 27	3 70
" "	No. 28	3 80

PATENT PLANISHED SHEET STEEL.

Patent Planished Sheet Steel. "A" $10 20, "B" $9 20

GALVANIZED IRON.

	Per 100 lbs.
26 Ga.—24, 26, 28 and 30 in. x 8 ft.	$4 40
26 Ga.—36 in. x 8 ft.	4 70
27 Ga.—24, 26, 28 and 30 in. x 8 ft.	4 70
27 Ga.—36 in. x 8 ft.	5 00
28 Ga.—24, 28 and 30 in. x 8 ft.	5 00
28 Ga.—36 in. x 8 ft.	5 35

HOOP IRON.

¾x22	¾x20	⅞x20
$3 20 100lbs.	$3 10 100lbs.	$3 00 100lbs.
1x20	1¼x19	1½x19
$2 90 100lbs.	$2 85 100lbs.	$2 75 100lbs.

PAINTED CORRUGATED IRON.

8-ft. sheets, 2½x28 Ga....per sq., $2 60

SOLDER.

XXX Guaranteed ½&½ per lb.	21c
Commercial ½&½ per lb.	20c
No. 1	16½c

SHEET ZINC.

600 lb. Casks.....base, per lb. 6¾c

COPPER.

Copper.....base, 20c

TIN PIGS AND BARS.

Banca, pigs, per lb	35@35½c
Straits pigs, per lb	35c
Straits in bars, per lb	37c

LEAD.

American Pig	$4 50@4 62½c
	5½@5½c

HARDWARE.

QUOTATIONS.

(The quotations given below represent the current hardware prices. They are not given as manufacturer's prices, and manufacturers should not be held responsible for them. Manufacturers sometimes name higher figures than those quoted for goods; they are not always selling at the price quoted, but goods are being sold at the figures printed below by manufacturers and jobbers.)

ADZES.

Carpenters'.
- Ajax.....40&10%
- Blood's.....40&5%
- Hunt's.....25%
- White's.....12½%

Coopers'.
- Barton's.....20%
- White's.....20%

Ship.
- Ajax.....50%
- Blood's.....40&5%
- Hunt's.....25%
- White's.....12½%

AMMUNITION.

Caps, Percussion—per 1,000.
- F L Waterproof, 1-10s.....50c
- G D.....35c
- Eley's.....52c

Cartridges.
- Peters Rim Fire Ctgs.....50&3%
- Peters Cent Fire, Pistol & Rifle 25&3%
- Peters Cent Fire, Military and Sporting Ctgs.....15&8%
- Peters Blank Ctgs, except 22 and 32, an additional 10% from above discount.
- Peters Blank Ctgs. 22 cal.....$1 18
- Peters Blank Ctgs. 32 cal., C. F.. 4 40
- Peters B B Caps, Round ball....$1 44
- Peters B B Caps, Conical ball...$1 85
- U. M. C. Rim Fire Ctgs.....50&3%
- U. M. C. Cent. Fire, Pistol & Rifl 25&3%
- Winchester Cent. Fire, Military and Sporting Ctgs.....15&8%
- U. M. C. B B Caps, Round Ball .....$1 75..18%
- U. M. C. B B Caps, Con. Ball. $1 85 net
- U. M. C. Rim Fire Shot Ctgs. 50&15&3%
- U. M. C. Cent. " " " 25&10&3%

Primers.
- Berdan Primers.....$1 00
- Peters Primers..... 1 20
- U. M. C. Primers..... 1 20
- Winchester Primers..... 1 20

Shells.
- Peters Empty Paper Shells, 10 and 12 gauge. League.....25&2%
- Peters Empty Paper Shells, 16 gauge. League.....20&2%
- Peters New Victor Nitro Shls..20&2%
- Ideal.....25&7%
- Peters Loaded Shells. League and Referee Semi-Smokeless 40&6%
- Peters New Victor Loaded Shells, with King's Smokeless...40&10&1%
- Ideals Loaded with King's Smokeless.....40&10&10&6%
- U. M. C. New Club, 16 gauge....20&2%
- U. M. C. New Club.....25&2%
- U. M. C. Nitro..... 20&2%
- U. M. C. High Base.....20&2%
- Winchester Blue Rivals ..... } 20&2%
- Winchester Yellow Rivals ... }
- Winchester Repeater .....20&2%
- Winchester Leader.....25&7%
- U. M. C. Loaded Shells, Black Powder..... } 40&6% full cases
- Winchester Loaded Shells, Black Powder..... }
- U. M. C..... } Smokeless 40&10&10&6% full cases
- Winchester..... }

Gun Wads—per 1,000.
- Peters Gun Wads.....18%
- U. M. C. Gun Wads.....18%

Powder.
- King's Quickshot Powder; Kegs $4.00; ½ kegs $2.25; ¼ kegs $1.25.
- King's Semi-Smokeless, new list..10%
- King's Smokeless, new list. 10%
- Austin Quickshot Powder, Kegs $4.00; ½ kegs $2.25; ¼ kegs $1.25.
- Dupont Smokeless, Sporting, 25, ...20, 10&10%

Shot.
- Drop shot, sizes smaller than B, 25-lb. bags, per bag.....$1 30
- Drop shot, B and larger sizes, 25-lb. bags, per bag..... 1 55
- Buck Shot, 25-lb. bags, per bag.. 1 55
- Chilled Shot, 25-lb. bags, per bag. 1 55

ANVILS.

- Trenton, 70 to 80 lbs.....9¾c per lb
- Trenton, 81 to 150 lbs.....9c per lb

AUGERS.

Boring Machine..... .....65&10%

Carpenters' Nut.....65&10%

Hollow:
- Ives' New Pattern.....25%
- Bonney's—list $30.00.....65&10%
- Stearn's, No. 1 .....doz. $42 00
- Stearn's, No. 3..... 33 50

Post Hole.
- Dalbey, 8-inch.....per doz. $ 5 75
- Digwell, 8-inch..... " 14 50
- Howe's, 6 and 8-inch.. " 12 50
- Vaughan's, 4 to 9-inch " 6 50

Rafting.
- Snell's.....50&5%

Ship.
- Snell's, with or without screw..... 40&5%

AWLS.

Brad, handled.....per doz. $0 25
- shouldered, ass'd, 1 to 4 .....per gr. 1 10
- patent, asst'd, 1 to 4 " 95

Harness, common..... " 1 20
- patent..... " 95

Peg, shouldered ..... " 1 10
- patent..... " 40

Scratch, No. 2, handled... " 4 50
- No. 1, socket handled.....per doz. 1 15

Sewing, common.....per gr. 1 10
- patent ..... " 95

AXES.

Boys', Handled:
- Camp Fire, 3-lb., per doz.....15 75
- " " 4-lb., freighters', per doz..... 6 75
- Cast Steel, good grade, pr. dz., 5 50
- Pioneer, per doz..... 6 75

Broad:
- Peerless.....50%
- Plumb's Canada Pattern, ½50 10 5%
- " Western " 40-10-5%
- Red Warrior, per doz.....$18 50

Firemen's, per doz.....$15 50

Single Bitted (without handles)
- Cuyahoga Chief, per doz.....$6 00
- Gladstone, " " 7 75
- Hubbard's " " 6 50
- Hunt's " " 6 25
- Lippincott's " " 6 25
- Mann's " " 6 25
- Pioneer " " 6 75
- U. S. A. " " 7 75
- Valley Forge " " 6 25
- Second Quality " " 5 75

Double Bitted (without handles):
- Lippincott's .....per doz $8 75
- Mann's ..... " " 8 75
- Pioneer ..... " " 9 25
- U. S. A..... " " 11 00
- Valley Forge..... " " 8 75

Ship, Blood s..... " " 18 50

BALANCES, SPRING.

- Frary's.....50%
- Pelouze.....20%

BAGS, PAPER NAIL.

Pounds..	3	5	10	16	20	25
Per 1,000.	$1 60	1 85	2 60	3 40	3 20	4 75

BARS, CROW.

Pinch or Wedge Point.....cwt. $3 60

BEAMS—SCALE.

P. S. & W Co.....40%

BEATERS.

Carpet, Rattan.....per doz $2 40
- Raymond's Steel Wire," " 80
- Woven Wire, No. 4.. " " 1 25

Egg.
- Dover Pattern.....per doz. $0 70
- Genuine Dover..... " 0 90
- Mammoth Dover..... " 1 75
- Lightning ..... " 0 84
- Lyon's (standard size) " 1 75
- Whip, French..... " 1 35
- Spiral..... " 0 40
- Spoon..... " 0 40
- Surprise.....per gro. 1 45

BELLOWS.

Blacksmiths'.....70&5%

Hand, 8 in.....per doz. $ 6 85
- 10 in..... " 8 40

Molders', 12 in.....per doz. 13 00

BELLS.

Call.
- 2¾ in. nickeled bell .per doz. $ 1 40
- 2¾ in. " brass bell" 3 00
- 3 in. " " " " 7 25
- 3 in. " silver alloy bell, ...per doz. 16 50
- 4½ in. " brass bell and base.....per doz. 15 75

Cow.
- Ordinary Goods.....70&5%
- High Grade .....60&10%
- Jersey.....70&10%

Door.
- Bigelow Automatic.. per doz. $9 50
- Rotary.
- 3 in. bronzed iron bell " 5 25
- 3 in. nickeled " " " 7 50
- 3½ in. " " " " 9 00

Hand.
- Hand Bells, Polished....60@60&10%
- White Metal.....50%
- Nickel Plated.....40%
- Swiss.....50&10%
- Silver Chime.....33⅓%

Miscellaneous.
- Church & School. Steel Alloy 50&5%
- Farm, lbs.. 40 50 75 100
- Each. $0 85 $1 25 $1 75 $2 40

Miscellaneous Cont.
- Strapped Sheep .....per doz. $1 75
- House Gong.....40&5%
- Sleigh, Round, Loose.....40&5%

BELTING.

Leather—List dated Nov. 12, 1901.
- Standard 75%
- Eclipse.....60&10%
- Extra Grade..... 50&10%

Rubber—
- Standard .....75&5%
- Amherst.....65&10%
- Extra.....60&2½%

BEVELS—TEE.

Stanley's, rosewood handle, new list.....40&5%

Stanley's, iron handle.....40&5%

BINDING—OIL CLOTH.

- Zinc.....75, 10&2½%
- Brass .....60, 10, 10&5%
- Brass Plated .....75&10%

BITS.

Auger.
- Extra Double Spur.....70&5%
- Ford Improved.....40&10%
- Irwin .....40&10%
- New Jenning's ..... 50&10%
- Russell Jenning's..... 25&7½%
- Clark's Expansive.....50, 10&5%
- Steer's " 33⅓%
- Irwin Car.....40&10%
- Snell's Car .....60&5%
- " Ship.....40&5%
- " " Auger Pattern Car..40&5%

Center .....40&10%

Countersink—
- Wheeler's .... per doz. $1 50
- American Snail Head " 0 70
- " Rose " " 0 80
- " Flat..... " 0 70
- Buck Bros'. Flat..... " 2 00
- German ..... " 0 70

Dowel, New Jennings.....40&10%

Gimlet—
- Standard Double Cut.....60, 10&5%
- German Pattern.....per doz. $0 42
- Gouge..... " 0 80
- Spoon..... " 0 80
- Countersink ..... " 1 30

Reamer—
- Buck Bros.' ½ Round. " 2 75
- " " Square .. " 2 50
- Standard ½ Round ... " 0 75
- " Square ..... " 0 75
- German Octagon.. .. " 0 75

Screw Driver—
- Round Shank..... " 0 48
- " " extra quality " 1 40
- Square Shank..... " 1 10

BLACKING—STOVE. (See Polish.)

BLADES—SAW.

Butchers'—
- Standard ¾ & 1¼in .....60&5%
- Clock Spring.....60&5%
- Star.....20%

Hack—
- Disston's .....25&5%
- Griffin's .....35&5%
- Star..... 20%

Wood—
- Jackson's.....per doz. $2 25
- Disston's—No. 6, 16, 26 & 045, $4 20; No. 11, $6.30.
- W. M. & Co.'s No. 20..per doz. $5 50

BLOCKS.

Snatch—
- Wooden .....50&10%
- Steel.....40&10%

Tackle—
- Wooden.....70&5%
- Steel .....50, 10&5%

BOARDS.

Store.....40&5%

Wash—
- Anchor ..... per doz. $1 60
- Globe..... " 2 10
- Banner..... " 2 60
- Crystal ..... " 3 15
- Brass King ..... " 3 15
- Nickel Plate ..... " 3 15

BOBS—PLUMB.

Carpenters', 8½ oz. iron..pr dz. $0 65
- 1½ lb. " " " 1 60
- 2¼ lb. " " " 1 80
- 13 oz. lead.... " 3 00
- 6½ oz. brass. " 3 30

Mason's, 3 lb. lead ..... " 4 00

BOILERS—FARM.

- Profit .....30&5%
- Solon ..... 35&5%

BOLTS.

Carriage, Machine, Etc.
- Carriage, Common, new list..60&5%
- Machine.....65&5%
- Elevator..... .....50&10%
- Plow.....50&5%
- Stove .....75&10%
- Tire.....75%
- Wagon Box Strap.....70&10%

Mortise Door—
- Gem .....50-10&5%
- Ives'.....50&10%

Barrel—
- Cast 50%
- Wrought.....75%
- " Bronzed..... .....40%

Flush, Wrought, B. K.....40&5%

Spring—
- Wrought.....75&10%
- " Brass .....75&10%

Square—
- Cast.....40%
- Wrought .....60-10&10%

BORERS.

Angular, Miller's Falls, per doz $12 75

Bung, Common Ring with Handle—

Inches	1½	1¾	2
Per doz	$6 00	6 90	8 10

Enterprise Mfg. Co., No. 1 List $1.50; No. 2, $2.00 each....25-10&5%

BOXES.

Mail, No........... 5 10 20
Per doz........$3 65 10 5) 13 00
Mitre—
New Langdon.................15&5%
Olmsted's 15%
Stanley's.............................30%
Seavey's ....per doz $18 00
Twine, Nos... 20 30 25 35 121
Per doz $1 25 1 35 2 65 2 65 3 50

BRACES.

Common Ball..............$1 35@1 45
Barbers' Pattern ....60&10%
Fray's Gen. Spofford's.........50&10%
" No. 66 to 146.............50&10%
P. S. & W. Co.'s Peck's Adjustable.......................50-10&5%

BRACKETS.

Hay-Rack, Wenzelmann's No. 1, $12.50; No. 2, $13.00 per doz.
Shelf—
Cast Iron, Plain ....50&10%
Stanley's Wrought Steel.......
.... 70-10&2½%
Wire........................75-10&5%

BROILERS.

Wire ....70&10%
Crown, Self-Basting, No.80..doz. $2 90

BUCKETS.

Pump Rubber—
Wychoff................per gr. $4 75
Cooper.................. " 5 50
Champion .... " 7 50
Victor .... " 9 50
Star.................... " 5 00
Well—
Galv'd Qts...... 8 10 12
Per doz $2 60 3 00 3 30
Wooden, top ear, plain, per doz 3 25
" " swivel " 4 65
" side-strap, plain " 3 35
" " swivel " 4 75

BUCKS, SAW.

Folding ....per doz $1 75

BURS, RIVETING.

Copper Burs Only............35-10&5%
Tinners' Iron Burs Only..........70%

BUTTS.

Cast-Iron.......................65&10%
Wrought Brass......................20%
Wrought Steel Br ght—
Nos. 800, 804, 808, 810, 814 and 834
.... 70&10%
Nos. 838, 840 and 842 ....75%
Nos. 822 and 823.....................80%
Wrought Steel, Japanned—
Nos. 731 and 727....................70%

CALIPERS.

Double ....40&10%
Inside and Outside...............40&10%
Wing.............................40&5%

CALKS.

Logger's Boot,(Lufkin R. Co's.)
.......................per M $3 65
Toe.
Shoenberger............per lb. 5c
Bessemer .... " 5½c
American .... " 7¼c
Swedes.................. " 8¾c

CANS.

Cheese Factory Can Stock—
Gallons.... 15 20 30 40
Per set....$2 90 $3 15 $3 75 $4 75
Milk Cans—Gals.. 5 8 10
Elgin Pat., each, $ $1 75 $2 10
Iowa " 1 60 1 70 1 85
New Elgin" 1 65 1 85
New York " 2 10 2 35
Oil—
1 Gal. glass, Daisy....per doz. $2 35
1 " cushioned " 3 90
Star, gals...... 1 2 3
Per doz........ $1 85 $3 00 $3 90
Per doz.
Champion Faucet, 5 gallon...$ 5 65
Sterling Tilting....5 " ... 8 25
"High C" Pump...5 " ... 9 25
Eureka Pump.....5 " ... 12 25
Wood Jacket ....50-10&5%

CAPS—GUN.

See Ammunition.

CARRIERS.

Hay—
Myers' Imperial.........each $3 40
" Clover Leaf...... " 3 40

CARTRIDGES.

See Ammunition.

CASTERS.

Acme—Ball Bearing..............35%
Bed................................70&5%
Common Plate—
Brass wheel.....................65&10%
Iron and porcelain wheel ····70&5%
Philadelphia Plate..............70&5%
Martin's.....................40-10&5%
Payson's........................70&10
Tucker's—Wood and iron wheel..70%
" Rubber wheel......65&10%

CATCHERS—GRASS

ieder's No. 1..........per doz, $6 25
Eureka......................... " 4 25
Ideal No. 4.......................... 50

CHAIN AND CHAINS.

Breast Chains—
Doubleslack........doz. pairs $5 00
With Covert snaps " 4 75
" slide......... " 2 90
Without slide..... " 2 60
Bright Ox Chains—
5-16in. $6 75: ⅜in. $5 75 per 100 lbs.
Bright Coil Chain—
American, new list...............40%
German.........................60-10&5
Triumph, new list...............30%
Cable Coil Chain—
Inch.......... 3-16 ¼ 5-16 ⅜
Per 100 lbs... $9 75 $7 25 $5 90 $4 75
Inch .... 7-16 ½ ⅝ ½
Per 100 lbs....$4 60 $4 50 $4 35 $4 25
Cable Log Chain—Advance 25c per 100 lbs. on Cable Coil.
Cow Tie Chains—
American 2 toggle..............50%
" toggle and snap......50%
" open and closed ring...........................40&5%
Halter Chains—
American, new list..............40%
German.....................60-10&5%
Niagara, new list..............40&5
Triumph, " 30%
Jack Chain—
Brass.......................50-10&5%
Iron..........................50-10&5%
Picture Chains—
Light Brass, 3 ft.......per doz. 63c
Heavy " 3 "....... " 75c
Pump Chain—Galvanized per 100 lbs.............................$4 45
Safety Chain—Brass............60&10%
Stretcher Chains—
5-16 in., $7.75—⅜in., $7.00 per 100 lbs.
Tie-Out Chains—Browns......70&10%
Trace Chains—Western Standard—
6½— 6-2..................per pair 30c
6½— 8-2..................... " 34c
6½— 8-3...................... " 33c
6½—10-2....................... " 39c
7 —10-2........................ " 44c
Add 2c per pair for Hooks.
" 2c " for Twist Link.
Wagon Stay Chains—
Inch ¼ 5-16 ⅜
Per 100 lbs. $6.50 $6.0) $5.25
Well Chains—
With Swivel............per doz. 95c
Without " .... " 80c

CHALK-CARPENTERS'.

Blue.....................per gross 58c
Red......................... " 48c
White....................... " 38c
Common White Sch'l Crayon............. " 5½c

CHARCOAL.

In barrels ....per bu. 23c

CHECKS-DOOR.

Blount 30%
Blum-Jap'd, $6.25; Brzd., doz... $7.00
Columbia.....................50, 10&5%

CHISELS.

Box—
Inches............ 10 12 14
Round....per doz. $2.10 $2.25 $2.75
Flat......per doz. 2.85 3.60 4.20
Cold—
Good quality......per lb. 13@ 22c
U.S.A..extra quality..per lb. 28c
Socket, Framing and Firmer—
Barton's............................ 20%
P. S. & W. Co's.................. 70%
For beveled back, add..per doz........................... 60c
Tanged, Firmer—
P. S. & W. Co's..............35&5%
With Handles add....per doz. 60c

CHUCKS-DRILL.

Standard Tool Co.'s 40%
Goodell's, for Goodell's Screw Drivers...............per doz. $6.25
Yankee, for Yankee Screw Drivers............................ 5.00

CHURNS.

Anti-Bent Wood, Gal.. 5 7 10
Each $3.85 4.10 4.30
Belle, Barrel........................ 70%
Common Dash, Gal.... 4 5 7
Per doz............. $6.50 7.25 7.75
Union, Gal............. 5 7 10
Each $3.40 3.65 4.65

CLAMPS

Adjustable—Martin's 40%
Carpenters'—Steel Bar......... 30%
Carriage Makers'—P. S. & W. Co.'s.......................40, 10&5%
Hose—
Sherman's, brass, ¾ in., ...per doz. 33c
Double, brass, ¾ in...per doz. 65c
Saw Filers—
Disston's list, $30 00 .... 30%
Stearn's, No. 0, $3.50, No. 1, $11.50, No. 3, $5.50 doz.
Wentworth's......................... 40%

CLAWS-TACK.

Cast, wood hdle ..per doz., 45@ 60c
Forged steel, wood handle ....per doz. 80c
Solid Steel...............per doz. $1.60
Giant.......................per doz. .60

CLEANERS.

Pot—Wire.............per doz. $0.45
Side-Walk—Steel..... per doz. 3.15
Window—
Peerless.....................50, 10&5%
XLCR........................ 65&10%

CLEAVERS.

Butchers'—F. R. Plumb's......35&5%
Family—Ajax, In..... 6 7 8
Per doz $5.50 5.75 6.25

CLEVISES.

Malleable..................per lb. 4¼c

CLIPS.

Axle.................................65&5%
Damper—
Standard ....per doz. $0.55
Troy .... " .38
Home.................... " .20

CLOTH.

Emery—
Ajax........................50&10%
B. & A........................... 50%
Hardware Wire—full rolls (100 ft.)
2 to 8 mesh black, per 100 sq. ft. $1.85
9 to 12 " " " 2.15
2 to 8 " galv. " " 2.70
7 and 8 " " " " 3.25
An extra charge is made for 50 ft. lengths, and a still further advance for smaller pieces.
Screen Wire—
12 mesh, painted, per 100 sq.ft. $1.10
14 " " " " 1.85

COCKS--BRASS.

Compression Bibb............60&5%
" Lock...............60%
Lever Bibb..........................60%
Liquor 60%
Racking..............................60%

COFFEE MILLS.

Enter. Mfg. Co., list Jan 17, '93...25%
Parker's...............................50%
Arcade............................60&10%

COLLARS--STOVE PIPE.

Inches 5 6 7
Plain Tin....per gr.$2.50 $2.80 $3 75
Japanned Tin, " 3.90 4.20 5.40
Lacquered Brass" 3.30 3.60 4.80

COMBS--CURRY.

Nos. 000 20 321 330 417 416
Per doz.$0.32 .80 1.00 .95 .80 1.00
Nos. 531 533 530 535 545 300
Per doz $0.96 1.20 1.10 1.65 1.40 1.30

COMPASSES.

Carpenter's.....................65&10%
Pencil--Faber's...........per doz.$1.00

COOLERS--WATER.

Galvanized Lined—Lever Faucet.
Gal. 2 3 4 6 8
Each $1.35 1.65 2.00 2.35 2.95
Galvanized Lined—Telegraph Faucet
Gal. 2 3 4 6 8 10 15
Ea$1.65 2.00 2.35 2.65 3.30 3.65 4.90
Porcelain Lined—
Gal. 3 4 5 6 7 8 10
Ea$4.50 5.75 7.00 7.75 8.60 10.40 12.25

COPPER—SEE METALS.

COPPERS.

Soldering--1 to 2 lb.....per lb. 25@29c
3 lb. and larger..... " 23c

CORD.

Picture--White Wire--List October 1900........................80&10%
Sash—
Baltic Braided Flax...per lb. 18¾c
India Hemp, cable laid " 13 c
" " hawser " " 12 c
" " plain " " 13½c
Italian " cable " " 21½c
Russian " " " " 17 c
Samson, white " 31½c
" spot " 30½c
Silver Lake, white " 24½c
" " drab " 31¾c

CORKSCREWS.

Humason & Beckley............33⅓%
Walker's............................33⅓%
Williamson's Regular 50%
Williamson's Forged Worm.....50%

COTTERS--SPRING.

Discount ....75&5%

COUPLINGS--HOSE.

Brass ....per doz. $1 00
Brass Plated........... " 85

COVERS, WAGON--SEE TENTS.

CRADLES--GRAIN.

Morgan's Grapevine...per doz. $22.00

CRAYONS--SEE CHALK.

CROOKS--SHEPHERDS'.

American Pattern .....per doz. $7 75
Montana " ..... " 8 00
Scotland " ..... " 7 00

CROW BARS.

Pinch or Wedge Point....per lb. 3½c

CUTTERS.

Meat—
Enterprise Nos. 5, 10, 12, 22, 32, and 42..........................25%
No. 100, list, $18.00...........40&10%
Nos. 2 and 4.......................35%
Ideal...................per doz. $9.75
Universal....No. 1 2 3
Per doz...........$10.75 $13.00 $18.00
Pipe-Stanwoods No. 1 2 3
Each..............$ .85 1.40 3.60
Slaw and Crout—
3-knife Crout..........per doz. $9.25
1 " Slaw.......... " 1.35
2 " " .... " 2.00
Washer.......................... " 7.75

DAMPERS--STOVE PIPE.

Standard.................... 50&10%
American .... 50&5%

DIES--STOCKS AND.

Discount............................40%

DIGGERS--POST HOLE.

Atlas.....................per doz. $ 8.50
Eagle.......................... " 6.25
Eureka......................... " 7.00
Hercules...................... " 10.75
Ryan's......................... " 16.50
See also Augers--Post Hole.

DIVIDERS.

Wing ....70&5%
Extension Wing.................35&5%

DOORS--SCREEN.

⅞ in. 4 panel painted per doz. $ 6.75
1⅛ " " " " 7.25
1⅛ " " natural pine, fancy. per doz............... 11.25

DOOR HANGERS—BARN.

No. 3. Superb......per doz. sets, $6 50
No. 4. Superb...... " " 7 75
Single Flange, D. B. Rail, ...per 100 ft. 1 60
Novelty Check Back,
.... 3 in 4 in 5 in 6 in
Per doz. pairs, $2.60 $3.90 $4.95 $6.25

DRILLS.

Bit Stock ....60%@65&5%
Blacksmith's Twist................60%
Breast—
Common ....each, $2.25
Millers' Falls............ " 2.10
Hand—
Goodell's Automatic--per doz.
No. 01 No. 03 No. 3 No. 20
$7.75 $12.50 $14.25 $11.00
Goodell's Single Gear per doz. $16.00
Millers' Falls " " 12.50
" " Double " " 15.00
Reciprocating—
Goodells'............per doz. $17 00
Bit Stock.
Standard List....60&5%@60%@10%

DRIVERS--SCREW.

Standard........................65&10%
Ajax...............................70&5%
Champion..............................50%
" Pattern..................75&5%
Clark's Interchangeable.. .... 33⅓%
Reed's Lightning.....................50%
Goodell's Spiral...............50&10&5%
Yankee Ratchet.......................50%
" " Spiral,....50&10&5%

ELBOWS.

Conductor...........................60%
Adjustable Stove—In. 5 6 7
Smooth....per doz. $0.98 0.96 1.40
Plan'd..... " 2.35 2.35 3.15
Corrugated Stove—In. 5 6 7
Smooth.....per doz. $0.98 .98 1.40
Pol'd........ " 1.75 1.75 2.70
Plan'd...... " 2 60 2.60 3.60
Four-Piece Stove—In. 5 6 7
Smooth....per doz. $0.63 .63 1.00
Pol'd....... " 1.15 1.15 1.00
Plan'd..... " 1.80 1.80 2.60
"O.H." Corrugated--In. 5 6 7
Common...per doz. 1.02 $1.20 $1,75
Smooth..... " 1.25 1.45 2.10
Polished.... " 2.10 2.50 3.15
Planished... " 2.90 3.50 4.35

EMERY--TURKISH.

Size ....5-lb. pkgs. ½ kegs, kegs.
No- 60 to 150, ℔ lb. 6¼c 4¾c 4½c
Flour ... . " 5¼c 3¾c 3½c

ENAMEL—IRON.

English, ½-pt. cans...per doz. $1.50
Nubian, " " ... " 1.80
O. V. B., " " ... " 1.25

EXTRACTORS--PIG.

See Forceps, Pig.

EYES.

Bright Wire Screw—See Goods, B.W.
Drifting Pick ....60&10%
Hooks and—
Brass..........................60&5%
Iron ....65&10%

FASTENERS, STORM SASH.

Moore's.....................per doz. $0 80
Schroeder's.......... " 1 50
Sensible............... " 1 10

FASTENERS, BLIND.

Zimmerman's..........................Net

FAUCETS.

Angle Plug..............per doz. $0 84
Brass--Andrew's 60%
Petroleum 60%
Wood--Cedar ....40&50%
Cork Lined..........................60%
Metal Key........................65&5%
Measuring--Enterprise........35&5%
See also Cocks.

FILES AND RASPS

Arcade ....75&5%
Black Diamond.................70&10%
Disston's..........................75&5%
Great Western..................75&5%
Keystone Mill..................80&20%
Kearney & Foote ....75&5%
New American ....75&10&5%
Nicholson's......................70&10%
Royal Mill ....80@20%
N. S. A .... 70&10&5%

FORCEPS—PIG

Barber's................per doz., $7 25
Superior.................. " 4 75
Whisson's Imp .... " 6 00

FORKS

Barley—
Steel.......................70&20&5%
Wood, 4 tines, $5.25; 6 tines, $6.25 doz
Coal...........................70&10&10%
Coke ....70&12½&5%
Cottonseed....................70&12½&5%
Hay—
Diamond, 2 tine..........65&10&5%
" 3 and 4 tine..66⅔&10&5%
Golden Eagle, 3 and 4 tine 66⅔&20&5%

FORKS—CONTINUED.

Header—
Diamond, 2 tine.....67½&10&5%
" 4 " .....66⅔&10&5%
Golden Eagle, 4 tine....66⅔&20&5%
Manure—
Diamond .....70&10&5%
Golden Eagle.....70&20&5%
Ore.....70&20%
Potato—
Digging..... .....60&25%
Scoop .....70&5%
Spading—
Diamond .....70&20%
Golden Eagle.....70&20&10%

FRAMES

Hack Saw—
Crown.....per doz., $ 8 75
Miller's Falls..... " 10 00
Star..... " 2 85

FREEZERS—ICE CREAM

Arctic—Qts... 1 2 3 4 6
Each.....$1 10 1 30 1 50 1 75 2 30
Qts..... 8 10 12 15
Each.....$2 85 3 75 4 50 5 20
White Mountain, with Crank—
Qts..... 1 2 3 4 6
Each.....$1 20 1 65 1 90 2 10 2 70
Qts..... 8 10 12 15
Each $3 60 4 60 5 90 7 00

GATES.

Molasses and Oil.
Perfection.....40&10&5%
Stebbin's.....75&10&5%

GAUGES.

Butt and Rabbet.
Stanley R. & L. Co.'s ..20&10&2½%
Cream Pail, Fairmont, per doz..$3 75
Marking, Mortise, etc.....
.....50&10%@50&10&5%
Saw—Atkin's sgle. 55c, dbl. 80c pr doz.
Wire.
Disston's.....25%
P. S. & W. Co.'s.....20%

GIMLETS.

Discount..... ... .40&10%@50%

GLASS—WINDOW.

All sizes, single strength.....89%
" double strength..... ..89%

GLASSES—LEVEL.

Stanley R. & L. Co.....50&5%

GLUE

Bulk.
B Amber .....per lb 9¾c
A White.....per lb 12½c
H. S. Amber.....per lb 17 c
Liquid.
Eagle .....40 %
LePage's—
List "A".....37½%
List "B".....33⅓%
List "C".....25 %

GOODS.

Bright Wire.....85&5%

GREASE, AXLE.

Wood Boxes.
Diamond.....per gr. $5.40
Frazer's..... 9.25
Hub Lightning..... 5.25
Paragon..... 6.75
Wood Pails.
Frazer's, 15 lb. 78c, 25 lb. $1.30 each.
Hub Lightning, 15 lb. 52c, 25 lb. 68c each.
Tin Cans.
1 lb. Frazer's carriage, pr. doz. $1.30
1½ lb. " wagon . " 1.30
3 lb. " " " 2.40
5 lb. " " " 3.50

GRIDDLES

Soapstone .....40&5%

GRINDSTONES

Family—In..... 7 8 9
Per doz $7 75 8 75 10 00
Loose.
Per ton .....$20 00@$21 00
Mounted—
Ball Bearing..... 1 2 3
Each $3 10 2 90 2 75
Common Bearing.. 1 2 3
Each $2 85 2 65 2 50
Schofield's—
Auto.....each, $3 30
Bitreadle..... " 3 10

HAFTS—AWL

Brad—Common.....per doz., $0.18
Peg—
Common..... " 21
Patent, plain top..... " 46
" leather top .. " 52
Sewing—
Common..... " 21
Patent..... " 52

HALTERS

Jute Rope.....per doz., $0 80
Sisal Rope... ..... " 1 95
Web ..... " 2 10
Leather, rope tie..... " 6 25
" leather tie... " 8 25

HAMMERS—HANDLED

Blacksmiths' Hand
Maydole's .....40&10%
Plumb's .....50&10&5%
Engineers'—
Maydole's .....40&10%
Plumb's Oil Finish.....60%
" Polished .....50&10&5%
Farriers'.
Maydole's ....35&5%
Plumb's .....40&5%
Machinists'.
Maydole's .....40&10%
Plumb's. .....50&10&5%

Nail.
Ajax.....per doz $5 75
Calumet..... " 3 40
Cast..... per doz $1 10@$1 50
Maydole's .....30&7½%
Plumb's.....40&5%
Vulcan .....35&5%
Riveting.
Maydole's.....35&5%
Plumb's .....40&5%
Shoe. Plumb's.....30&5%
Tack.
All Iron ....per doz $0 32
Pol'd Iron, Hickory hdl " 0 48
Mall. Iron, Inlaid..... " 1 50
Magnetic 1 2 3
Per doz..... 70c 80c 95c
Magazine.....per doz $4 75

HAMMERS—HEAVY.

Heavy Hammers and Sledges.
Under 5 lbs.....70&10%
5 lbs. and over 75%
Masons'—Single & Double Face..75%

HANDLES.

Auger.
Common Ass'd.....per doz $0 86
Peck's Adjustable.... " 2 10
Roger's " .... " 4 15
Ives' " ....per set 1 25
Axe.....40&5@50%
Chisel.
Hickory, Tanged Firmer, Assorted, 24c; Large, 26c per doz.
Hickory, Socket Firmer, Assorted, 18c: Large, 21c per doz.
Applewood, Tanged Firmer, Assorted, 27c; large, 36c per doz.
Applewood Socket, Firmer, Assorted .....per doz 24c
Leather Head, Tanged Firmer, ...per doz 62c
Leather Head, Socket Firmer .....per doz 48c
Leather Head, Socket Framing .....per doz 52c
Coal Pick .....40&10%
Drifting Pick.....40&10&5%
File, assorted 13c, large 16c per doz.
Hammer.
Adze Eye.....per doz 35c
Blacksmiths'..... per doz 36c@55c
Machinists'..... " 38c@60c
Hatchet.....per doz 36c
Hay and Manure Fork....50&5%@60%
Hoe and Rake .....50&5%
Saw, Plain 72c, Varnished 68c per dz.
Screw Driver, Assorted 42c, Large 48c per doz.
Shovel and Spade .....50&5%

HANGERS

Barn Door—
Rival.....per doz. prs., $4 15
Superb ..... " 6 45
Safety Flexible. " 7 50
Prouty ..... " 5 40
King..... " 5 20
Eave Trough—
Baker's.....per gr., $2 35
Woodruff's ..... " 2 10
Imperial 15%
Wire 25%
Parlor Door—
Acme.....per set $3 75
Ives' Improved ..... " 2 50
Lane's Standard..... " 3 50
" New Model.... " 2 80
Prouty ..... " 3 00
Wilcox Trolley ..... " 3 75

HASPS.

Hinge, Wrought.....50&20%
With Staples—See Staples.

HATCHETS.

Ajax .....40&10&5%
Blood's.....40&10%
Cast Claw.....per doz $1 50@$1 75
Cast Shingling.... " 1 10@ 1 35
Duffy's Barrel.....per doz 17 50
Germantown .....35&5%
Hammond's 40%
Plumb's .....40&10&5%
Plumb's Warehouse.....40%
Roger's Ideal.....per doz $5 25
Underhill's Star Lath.....40%
U. S. A.....40%

HINGES.

Blind.
Clark's Gravity, 1 2 3
Per doz sets.....74c $1 80 $3 50
Parker's..... .....70%
Shepherd's Noiseless, for Wood casing.....doz 95c
Stanley's Wrought..per dz sets 84c
Gate.
Clark's, 1 2 3
Hgs & Ltchs, dz.. $2 20 $2 35 $3 60
Hinges Only, " .. 1 60 1 70
Latchs Only, " .. 0 65 0 70
Knuckle.....per doz prs $6 25
Leed's..... " sets 6 50
Superior ..... " prs 9 25
Spring.
American.....25%
Bommer Bros. Ball B'rng Floor 40%
Bommer Bros. Spring Hinges .40%
Chicago.....25&5%
Clover Leaf.....per gro $8 75
Columbia Dbl. Acting....40&10&5%
Gem 25%
Ideal Detachable,.....per gro $10 80
New Idea ..... " 8 75
Oxford.....20%
Wrought Iron.
Light Strap Hinges.....70&20&5%
Heavy Strap Hinges.....75, 25 & 5%
Light T Hinges.....66⅔, 20 & 5%
Heavy T Hinges .....60 & 25%
Extra Heavy T Hinges..75, 20 & 5%
Cor. Heavy Strap.....75, 15 &5%
Cor. Ex. Heavy T.....75, 20 & 5%

Screw Hook and Strap.
6 to 12in.....per 100 lbs. $3.75
14 to 20in ..... " " 3.50
22 to 36in ..... " " 3.25
Screw Hook and Eye.
¾ to 1in .....per 100 lbs. $6.50
⅝in ..... " " 8.00
½in ..... " " 10.00

HOES.

Garden.....75&20%
Grub ..... 65&10%
Hazel.....per doz $6 25
Ladies' and Boys'.....70&30%
Mortar.....75&20&5%
Planter's Eye.....60&5%
Weed .....75&10&7½%

HOOKS.

And Eyes.
Brass .....60&5%
Iron.....65&10%
Awning.....per gro $1 50
Belt.....75&5%
Bench—See Stops, Bench.
Box, In. 6 8 10 12
Doz.. $1 25 $1 60 $1 70 $2 25
Humason & Beckley's...pr dz $2 40
(See Goods, Bright Wire.)
Bush.
Common Axe Handle ..... per doz $7 00@$8 50
Hamilton Pattern.....per doz $7 25
Chain—In. ¼&5-16 ⅜ 7-16 ½
Per 100.. $8 25 $9 75 $11 50 $12 00
Clothes Line.
Japanned.....per doz 21c@22c
Galvanized..... " 35c
Coat and Hat.
Cast Iron.....per gro 72c@$1 00
Gem Wire.....65%
Conductor.
Malleable..... 50&10%@50&10&5%
Wrought.....40&10%@50%
Corn.
Common, unpolished, per doz. $1 30
" polished... " 1 60
"Cut Easy," serrated, per doz. 2 90
Gate.—See Goods, Bright Wire.
Grass.
Common, Nos. 2 3 4
Per doz..... $1 60 $1 65 $1 70
German .....per doz $1 85
Little Giant..... " 3 10
Wood's..... ... " 1 30
Hammock.
Common..... " 21c
With Plate..... " 36c
With Screw..... " 36c
Piggot's..... " $1 05
Lambrequin or Drapery...per gro 21c
Picture .....50%@50&10%
Potato and Manure.....70&10&7½%
Screw, Brass.....80&5%
(See Goods, Bright Wire.)
Seat Spring .....per lb 5½c

HOOPS—TUB.

Ever Ready..... per case $1 65

HOSE—GARDEN.

Ply 3 4 5 6 8
Black, pr ft. 7¼c 8½c 9½c 10¾c 11¾c
Cotton, 3 ply.....per ft 6¾c
Red, 3 ply ..... " 7½c
Yucatan Endless...per ft 11¼c@12¼c

HUSKERS.

Boss.
Nos. E A B P PX
Dz. $1 85 $2 00 $1 95 Gr. $5 90 $5 40
Nos. 2000 3000 4000 O OX
Gr. $3 10 $6 75 Dz. $1 15 $2 25 $1 75
Brinkerhoff's ....per gro 14 50
Common Sense.....per doz 1 60
Harrington..... ..per gro 4 50
Ideal—Nos. 102 101 100
Per doz..... $1 60 $3 00 $3 15
Johnson's ....per gro 7 75
Tyler's ..... " 8 40
Vaughan's ..... " 2 90

IRON.

See Metals—First column.

IRONS.

Curling.
Common ....per doz 33c@48c
Princess.....per doz $0 60
Yale..... " 0 84
Oxford..... " 1 10
Ruby ..... " 1 50
Tourist, Folding ..... " 0 90
Pinking..... " 0 60
Plane.
Wood Bench.....20&5%
Stanley R. & L. Co. (new list)25&5%
Sad.
Charcoal.....per doz $11 25
Common, Polished .....per lb 3c
" Nickel Plated .. " 4c
Chinese Polishing.....per doz $7 50
Laundry, No. 1, $5 40; No. 2, $5 65 per doz.
Mrs. Pott's.
No. 50 J, Enterprise...per set 72c
No. 55 J, " ... " 69c
No. 50 T, " ... " 75c
No. 55 T, " ... " 73c
No. E 30, " ... " 98c
No. 50, Howells ..... " 64c
No. 55, " ..... " 62c
Tailors' Sad .....per lb 4¼c
" Geese..... " 4¼c
Tuyere.
Single Duck Nest.....per doz $5 25
Double " " ..... " 6 25
Sutton.....each 2 60

JACKS.

Locomotive .....75&5%
Wagon.
Meeker's ....per doz $11 25
Miller's No. 2 ..... " 7 75
T., M. & S..... " 9 00
Winner..... " 7 75

KETTLES.

Brass.....20%
Caldron.....35&5%
Copper .....per lb 26c
Maslin..... .....65&10%
Sugar .....50&10&5%

KNIVES.

Beet Topping.
Clyde, 9-in. Scimiter Blade.dz $4 25
" 12-in. Straight " .dz 2 50
Corn.
Acorn.. .....per doz $2 10
Ajax..... " 2 25
Clipper, Light, $1 60; Heavy, $1 75 per doz.
Disston's.....per doz $2 85
Easy (attached to foot) " 7 75
Greenleaf's..... " 3 60
Drawing.
Standard.....70%
Adjustable 20%
Barton's Carpenters'.....10&5%
" Folding Handle....25&5%
Hay.
American, Sickle Edge...doz $10 25
Canton, Sickle Edge..... " 8 25
Heath's..... " 8 25
Lightn'g, Holt's Genuine " 5 75
Lightning Pattern..... " 5 50
Wadsworth's Sp'r Point. " 8 25
Hedge.
Ajax, Heavy, $5 75; Ex. Heavy, $7 75 per doz.
Hoop..... .20%
Mincing.
Common, Single .....per doz 48c
" Double..... " 65c
Streeter, 4 Blade, $1 30; 6 Blade, $1 90 per doz.
Putty.
Common.....per doz 84c
Goodell's.....per doz $1 30@$1 80
Russell's..... " 1 75@ 2 25

KNOBS.

Base, 2½-in. Maple, Rubber Tip, ... per gro $1 60
Door, Mineral.....per doz 0 80
Porcelain ..... " 0 90
Jet..... " 0 88
Picture.....60&10&5%

LADDERS.

Common Long .....per ft 8½c@13c
Extension .....per ft 10½c
Step.
Common..... " 6c
" With Shelf, add 10c.
I X L.....per ft 19c
Miller's Household. per ft 13c@15c

LANTERNS.

Bull's Eye Police.
3-in Flash Light.....per doz $6 00
2¾-in Regular..... " 4 00
3-in Regular..... " 5 00
Tubular, Berger.....40&10&5%

LEADERS—CATTLE.

Nos. 1 2 3
Per doz... $0 70 $0 85 $3 75

LEATHER—LACE.

Cut .....50&5%
Sides, Ex. Quality..... .per sq ft 21c

LEATHERS—PUMP.

Valve and Plunger.....50%

LIFTERS.

Stove Cover.
Japanned.....per gro $2 60
Coppered..... " 3 40
Alaska ..... " 7 50
Chilkoot..... " 4 75
Devore's..... " 5 50
Zero ..... " 3 50
Transom, Payson's.....70&10%

LINES.

Chalk, Twisted in 20-ft hanks.
Nos. 15 14 13 12 11
Per doz.. 10c 12c 17c 22c 29c
Twisted in 50-ft balls.
Nos. 1 2 3 4
Per doz..... 24c 30c 36c 44c
Braided in 20-ft hanks.
Nos. 0 1 2
Per doz..... 23c 26c 32c
Masons', in 100-ft hanks...doz $1 00
Clothes.
60-ft Jute .....per doz $0 90
72-ft " ..... " 1 00
60-ft Sisal ..... " 1 50
72-ft " ..... " 2 00
60-ft Cotton..... " 1 25
50-ft Braided Cotton.. " 0 84

LINING—STOVE.

In Bricks.....per crate 42c

MACHINES.

Boring.	Without Augers.	With Augers.
Ajax .....per doz	$5 25	$6 75
Angular... "	3 25	5 00
Boss ..... "	4 50	5 75
Upright... "	2 90	4 50

Leather Riveting.
Chicago, Pomeroy ....per doz $9 75
Excelsior..... " 2 50
Handy..... " 2 10
Little Giant..... " 3 10
Pony, Pomeroy ..... " 8 00
Washing.
Boss. 1 2 5 3
Per doz.. $54 00 $60 00 $69 00 $60 00
Globe, No. 1.....per doz $51 00
Horton Rotary..... " 54 00
O K Rotary ..... " 58 00
Round Wayne..... " 26 50
U. S. Steel..... " 60 00
Western Square, No. 2, $26 50; No. 3, $28 50 per doz.

MALLETS.

Carpenters'.
Fibre Head, Small. Med. Large.
Per doz..... $5 00 $5 75 $6 75
Round Hickory.....per doz $1 75
" Lignumvitæ.... " 2 75
Square Hickory..... " 1 75
" Lignumvitæ .. " 3 25
Tinners'.
Applewood ..... " 1 65
Hickory..... " 0 80
Hickory Sheet Iron.... " 0 95

MATS.

Door.
National Rigid.....60&5%
Queen Flexible 50%
Stove.
Augite Asbestos.....per doz $0 25
Crown " ..... " 0 30
Wire Covered Asbestos, Ex. Heavy .....per doz 1 00

MATTOCKS.

Extra.....65&10%
Hunt's..... 40&5%

MAULS.

Post.
Iron, lbs. 10 13 16 18 20
Per doz. $2 75 $3 30 $3 95 4 40 $4 75
Wood face, lbs. 10 11 12
Per doz..... $4 50 $4 75 $5 00
Wood Choppers'.
Lake Super'r & Oregon Pat.70&10%

MEASURES.

Galvanized..per dz ⅛ pk 1 pk ½ bu
Japanned.... " $1 60 2 35 $3 10
Iron Bound. " 1 40 1 70 2 00

METAL.

Babbitt.
Alm .....per lb 8¾c
Best..... " 23c
Common, No. 4..... " 6½c
Copper Mixed..... " 18½c
Magnolia Metal..... " 19c
Tony..... " 10¼c
See Metals—In first column.

MICA.

First Quality.....40&5%
Second Quality.....50&10&5%

MILLS—COFFEE.

Enterprise.....25&5%
National.....30%
Parker.....50&10%@60%

MOPS.

Erie .....per doz $3 15
Handled Cotton.
Lbs. ¾ 1 1¼ 2
Per doz.. $1 65 $2 10 $2 25 $2 95

MOWERS—LAWN.

Ball-Bearing.
In. 15 17 19 21
Each..... $7 00 $7 60 $8 25 $8 90
Champion.
In. 12 14 16 18 20
Ea.. $2 10 $2 15 $2 15 $2 20 $2 85
Champion, High Chief.
In. 16 18 20
Each..... $3 40 $3 70 $4 00
Cheap Grades.
In. 12 14 16 18
Each..... $1 90 $1 95 $1 95 $2 10
Clipper .....50&10&10%
Girard, in. 14 16
Each $2 60 $2 80
Philadelphia.
All Styles Except A & E.....70&5%
Styles A & E.....60&5%

MUZZLES.

Horse.
Nos. 1 2 3 4 5
Doz.$0 30 $0 50 $0 55 $0 70 $1 00

NAILS.

Horse Shoe.
Ausable.....50%
Capewell 10%
Perfect.....40&5&
Putnam $3½%
Star 35%
Picture.
Brass Head.....40&10%
Judd's .....40&10%
Wire Nails & Brads.....80&10&10%

NETTING—POULTRY.

Galvanized.....85%

NIPPERS.

End Cutting.
P. S. & W. Co.....40&5%
Stubb's Pattern .....40&10&5%
Hoof.
Heller's.....40&5%
P. S. & W. Co.....40&10%
V. & B 35%

NOZZLES.

Hose.
Genuine Boston.....per doz $3 40
Genuine Gem..... " 3 60
Magic ..... " 3 60

NUTS—HOT PRESSED.

Square Blank.
In. ¾ ⅞ ½ ⅝ ¾ ⅞ 1
Lb. 9¼c 6¼c 4¾c 4¾c 4¼c 4c 3⅝c
Square Tapped.
In. ¼ ⅜ ½ ⅝ ¾
Lb. 12¼c 10¼c 6¼c 5½c 5¼c

OILS.

Linseed, Strictly Pure.....per gal 66c

OILERS.

Chase Pattern.
Brass and Copper .....35&5%
Zinc.....50&10&5%
Engineers'.
Cannon.....40&10&5%
Steel .....60&10&5%
Tin.....per doz $2 50@$3 00
Machine.
Ajax .....per doz $0 80
Copper Plated Steel... " 1 50
Malleable Iron.....40&10&5%
Tin.....per doz 50c@65c

OPENERS.

Box, in. 10 12 14
Flat ...per doz $2 85 $3 60 $4 15
Round.. " 2 10 2 25 2 70
Can.
American.....per doz $0 26
Delmonico..... " 1 50
Never Slip..... " 0 68
Perfect ..... " 1 35
Tip Top ..... " 0 84
Crate, V. & B..... " 5 75

OUTFITS—COBBLING.

Combination ....per doz $11 25
Economical .... " 4 50
Family..... " 9 25

PADLOCKS.

Standard Wrought.....70&10&5%
Champion 50%
Eureka..... .....40&10&5%
Yale.....60&5%

PAILS.

Cream.
14-qt., Without Ga....per doz $3 00
20-qt., " " .... " 3 50
20-qt., With Gauge.... " 5 00
Sap, 10-qt., Galvanized, $1 85; 12-qt., Galvanized, $2 20 per doz.
Stock, Galvanized.
Quarts. 14 16 18 20
Per doz... $3 75 $4 00 $4 75 $5 25
Water, Galvd, qts. 10 12 14
Per doz..... $1 85 $2 20 $2 50
Wood.
Cable, 2-Hoop, $1 80; 3-Hoop, $2 10 per doz.
Cedar, 3-Hoop, $2 60 per doz.
Standard, 2-Hoop, $1 65; 3-Hoop, $1 85 per doz.

PANS.

Dripping.....50&10&5%
Fry, Common.....60&10&5%
Acme .....60&5%
Roasting.
Brownie.....Each 30c@37c
L. & H..... " 58c@80c

PAPER.

Building.
Plain.....per 100 lbs $1 10
Tarred..... " 1 25
Tarred Felt..... " 1 60
Diamond A, Red Rosin.pr roll 0 63
Leader, Red Rosin..... " 0 48
Sand and Emery.
Ajax.....50&10%
B. & A.....50%
Wrapping.
Grecian Express .....per lb 3¾c
Rag ..... " 1¾c

PARERS.

Apple.
Bay State .....per doz $13 00
Reading ..... " 6 75
Turntable ..... " 6 00
White Mountain..... " 5 25
Potato.
Goodsell's Saratoga..per doz. $6 50
White Mountain..... " 6 00

PICKS

Drifting and Poll Picks.....60&10%
Extra Railroad.....65&10%
Surface.....65&10%

PINCHERS.

Carpenters', wrt. iron, pol. steel jaws.....30%
Blacksmiths'.....50%
P. S. & W.....40&10&5%

PINS.

Clothes.
Common.....per gr..$0 12
Hoyt's..... " .. 30
U. S..... " .. 70
Picket.
Fluted.....per doz..$0 72
Round..... " .. 1 55
Spiral ..... " .. 1 90

PIPE.

Conductor.	Nested	Not nested
Eastern.....	70&10%	70&7½%
Central	70& 5%	70%
Southwst'n.	60&15& 5%	60&10&7½%
Missouri River.	70& 5%	70%
Southern.....	65&7½%	65& 5%
Lead.		
Full coils.....	per lb..	$0 5¾
Cut "	" ..	06

Stove.

Acme—In.	5	6	7
Smooth, per jt...	11½c	11½c	13¾c
Made-up—In.	5	6	7
Smooth.....	11¼c	11¼c	14½c

7 to 6 in. Smooth Tapers, pr jt..15c
6 in, Smooth T's..... " ..20c
Wrought Iron.
List March, 1900.
⅛ to ⅜ in., black.....discount, 52%
¾ to 12 " " ..... " 60%
⅛ to ⅜ " galvanized.. " 39%
¾ to 12 " " .. " 47%

PLANES.

Ohio.....60&5%
Stanley Planes, new list..30%@30&5%
Bailey Planes.....35%
Sandusky.....25%

PLANTERS.

Corn,
Improved Eclipse....per doz..$7 75
Monitor..... " .. 7 25
Triumph..... " .. 5 75
Potato
Acme.....per doz.. $5 75
Challenge..... " .. 10 75

PLATES—TIN.

See Metals in Column 1.

PLIERS.

Button's—In. 4½ 6 8 10
Per doz.....$2.60 $3.10 $3.90 $5.20
Button's Pattern.
In. 4½ 6 8 10
Per doz.....$2.35 $2.50 $3.45 $4.40
Cutting.
Cronk's Comb.....per doz..$6 25
Bernard's.....30%
Lodi.....40&10&5%
Stubb's.....50%
Fencing.
Cronk's.....per doz..$9 25
Farmers' Choice..... " .. 8 75
Russell's..... " .. 8 65
Flat and Round Nose.
Bernard's.....30%
German.....50%
Lodi.....40%
Paragon.....40&10%
P. S. & W. Co.....60%
Gas—In. 8 10 12
Per doz.....$3.10 $4.00 $4.90

PLUMBS AND LEVELS.

Common.....75%@75&10%
Cook's.....40%
Davis' Iron 30%
Davis' Inclinometer.....20%
Stanley's
Nos. 00S 0S 2S 3S
Per doz..$4.15 $4.60 $7.20 $7.90
Nos. 30 25 50 35
Per doz.$12.90 $17.20 $17.20 $11.75

POKERS—STOVE.

Wr't Iron, str't or bent, per doz.$0 50
Wr't Iron, wood hand'ls " 75
Nickel pl'td, coil hdl's.. " 70

POKES—ANIMAL.

American .....per doz.....$2 60
Brown's, wr't steel " ..$5 25@6 25
Eagle..... " $4 25
Success..... " 2 60

POLES—FISHING.

Bamboo.
Ft. 12 14 16 18 20
Pr 100..$2.75 $3.40 $4.75 $6.00 $7.75

POLISH.

Metal.
Burnishine, ½ pt....per doz..$1 60
1 pt..... " .. 2 60
Pride of the Bar..... " .. 1 60
Putz Cream.
Pts. 1-6 ¼ ½
Per doz.....$0.84 $1.35 $1.80
Pts. 1 2 4 8
Per doz.$3.60 $6.00 $9.00 $18.00
Wondershine
Pts. 1-6 ½ 1 2
Per doz...$0.68 $1.30 $2.15 $3.00
Shoe.
M. D. C.....per doz..35c@50c
F. C. O..... " 40c
T. M ..... " 50c@$1 25
Imperial.....per gr.....$5 00
Stove.
Black Eagle, 1 lb cans, pr gr..$13 00
Blackene, 1 lb cans..... " .. 13 00
Black Jack, 1 lb cans.. " .. 9 00
Dixon's Carb. of Iron. " .. 5 75
Enameline..... " .. 4 75
Nickel Plate..... " .. 4 50
Rising Sun ..... " .. 6 00

POPPERS, CORN.

Round or Square, 1 qt.per doz..70@75c
Square, 1½ qt.....per doz., 90c
Square, 2 qt.....per doz., 1 20
1 qt. reversible .....per doz., 1 45

POTS—FIRE.

Bernz.....each..$3 85
Clayton & Lambert's,each.$4 75@6 25
Gate City.....each.. 6 25
Gem ..... " .. 6 75

POWDER.

See Ammunition.

PRESSES—FRUIT AND JELLY.

Enterprise Manufacturing Co... 25%
Henis .....per doz. $2 10

PRUNERS.

Disston's Pole.....per doz..$7 50
Henry's Improved..per doz..65&10%
Water's Improved.. " 75%

PULLERS.

Cork.
Modern.....each..$2 60
Quick and Easy..... " .. 2 90
Nail.
Giant.....per doz..$9 00@10 50
Giant Pattern. " .. 6 00
Tack—Giant .... " .. 60

PULLEYS.

Awning—Jap'd.....35&5%
Clothes Line.....30%
Hay Fork.
Iron Wheel, 5 in .....per doz..$1 70
Wood Wheel, 6 in ... " .. 1 60
Wood Wheel, 6 in... pass knot..... " .. 1 75
Hot House—Jap'd 33⅓%
Screw..... " 35%
Side..... " 35%
Sash.
Chicago .....per doz..$0 27
Clark's..... " .. 40
Common Sense, 2 in.. " .. 26
" Pattern, 2 in.. " .. 21
Empire..... " .. 23
Ideal..... " .. 21
Ottumwa, ball b'ring " .. 38
Grand Rapids, No. 17 " .. 38
" " No. 11 " .. 24

PUMPS.

Pitcher Spout.
Nos. 1 2 3 4
Each..... $0.88 $0.98 $1.10 $1.30
Spray.
Blizzard.....per doz..$14 25
Cyclone, tin..... " .. 3 90
" copper..... " .. 6 75
Daisy..... " .. 8 75
Little Giant.....each.. 2 40

PUNCHES.

Conductors', No. 22....per doz..$2 50
Machine.....per lb . 19
Saddlers'.
Common.....per doz..60c@70c
Good..... " ..72c@84c
Spring.
1 Tube .....per doz..$2 25
4 Tube, revolving.... " .. 5 25
Tinners'.
Hollow.....40%
Solid.....each..5¼c

PUTTY.

In Bladders.
Strictly pure .....per 100 lbs. $2 35
Commercial ..... " " 2 10

RAIL.

Barn Door.
Light Wrought .. ..per ft. 4¼c
Safety ..... " 5¼c
Single Flange ..... " 1¾c
Sliding Door.
Painted iron .....per ft. 4¼c
Bronzed wr't iron..... " 8½c

RAKES.

Coal or Road.....per doz. $5.25
Garden.
Steel, braced .....70&30&5%
Steel, bow.....70&20&2%
Malleable iron, heavy.....70@10%
Hay—Wood.....per doz. $1 05@1 70
Lawn—Wood.
Common .....per doz. $2 25
Automatic..... " 6 00
New Lawn Queen .... " 3 60
Jumbo, 36 teeth ..... " 5 75

RASPS—See Files.

REGISTERS.

List Sept. 1, 1901.
Black Japanned, White Japanned, Bronzed Finishes, Nickel Plated, Electro Plated Brass, Bronze or Copper.....75&50%

RINGS

and Ringers—Hog.
Blair's Rings .....per doz. 60c
Blair's Ringers ..... " 84c
Brown's Rings..... " 65c
Brown's Ringers..... " 90c
Champion Rings..... " $2 35
Champion Ringers..... " 1 70
Hill's Rings..... " 42c
Hill's Ringers..... "70c@95c
Mazor Rings ..... " 80c
Mazor Ringers ..... " $1 15
Perfect Rings ..... " 84c
Perfect Ringers..... " $1 05
Wolverine Rings..... " 1 50
Wolverine Ringers.... " 70c
Bull.
Copper, 2¼-in. 3-in.
per doz..... $1 50 $1 80
Steel.....per doz. 1 00 1 10
Steel, Nickel Pl't'd, 2¼-in., doz. 1 35
Fruit Jar—White .....per lb. 30c
Key.
Split, round.....per doz. 16c
Split, square ..... " 32c
Ball, round..... ..... " 32c

RIVETS.

and Burrs.
Copper Belt .....50&10&5%
Coppered Iron 75%
Tinners'.....75%
Hame.....per lb. 8c
Slotted Clinch .....per doz. 70c@75c
Tubular—Nos. 1 and 2, assorted sizes.....per doz. 60c

ROPE.

Per lb.
Manila, 7-16 inch diameter and larger.....13¼c "
Sisal, 7-16 in. and larger.. 9¾c "
Cotton.
¼ and 5-16-in. on reels...per lb. 12c
¼ and 5-16-in. in coils... " 12½c

RULES.

Boxwood .....40%@40&10%
There is no regular discount on Boxwood Rules. They are now sold net.
Ivory .....35&5%

SAWS.

Back.
Disston's.....25&5%
Jackson's .....25&5%
Butchers'—Disston's.....40%
Circular.
Disston's.....50%
Hiles'.....50%
Compass.
Common .....per doz. $1 35@1 60
Disston's .....25&5%
Cross-Cut.
Atkin's.....40%
Disston's.....40&10%&50%
Pocahontas Bit.....per ft. 39c
Pocahontas, Blued ..... " 41c
Dehorning.
Atkins'.....per doz. $5 50
Disston's ..... " 5 75
Hack.
Disston's.....30%
Keystone.....30%

SAWS—CONTINUED.

Hand and Rip.
Brown's ....30&5%
Disston's No. 7....30&5%
Disston's Nos. 8, D8, 12, 76, D100, and 120 ....25&5%
Gorham's Comb....30&5%
Keystone....30&5%
Sam Sickles', hand...per doz. $4 25
"I Will," hand.... " 5 75
"I Will," rip.... " 6 75
"U. S. A." hand.... " 12 25
"U. S. A." rip.... " 14 25
Keyhole—Disston's .... 25&5%
One Man 50%
Panel.
Brown's ....30&5%
Disston's No. 7....30&5%
Disston's Nos. D8 and 12....25&5%
"I Will" 40%
"U. S. A." ....40&10&5%
Pruning.
Avery's Duplex ....25&5%
Brown's ....25&5%
Disston's....25&5%
Wood.
Common....per doz. $4 50
Handy .... " 7 50
Happy Medium .... " 7 00
Wood Sawyers' Delight " 8 25

SAW SETS.

Common Lever....per doz. $ 1.20
Stillman's Lever....per doz. 1.30
Leach's.... per doz. 5.00
Nash's....per doz. 4.20
Monarch....per doz. 6.50
Morrill's, Old Style....per doz. 5.00
" No. 1....per doz. 7.25
" No. 3 & 4 X Cut. per doz. 11.50
" No. 11....per doz. 8.40
Aiken's Pattern....per doz. 3.50

FRAMES—SAW.

Common, plain....per doz. $1 20
" painted.... " 1 60

SCALES.

Counter.
Fairbank's Standard....40%
Hatch's....per doz. $21 50
Little Detective, 1 2 6
Each $1 65 1 85 1 80
No. 1 Tea ....per doz. 7 75
Union Platform....each 2 10
Pelouze 25%
Turnbull's Market....50%
Platform.
Common, 600 800 1000
Each $7 75 8 25 10 25
Chicago Standard....33⅓%&10%
Fairbank's Standard....40%

SCOOPS.

Ames....10&5%
Eastern Pattern. Socket Strap.
Nos. 2 3 4 5 6
Per doz. $9.00 9.25 9.50 9.75 10.00
Nos. 7 8 9 10 12
Per doz. $10.25 10.50 10.75 11.00 11.50
Western Pattern. Socket Strap.
Nos. 1 2 3 4 5
Per doz. $8.50 8.75 9.00 9.25 9.50

SCRAPERS.

Box.
Stanley's Adjustable, per doz. $3 60
Triangular .... " 2 10
Cabinet.
Ajax ....per doz. $2 25
Cast Steel .... " 65c@75c
Stanley's No. 80.... " $7 75
Road.
Cubic ft. 7 5 3
Without runners, ea. $1.50 4.20 4.00
With runners.... " 4.75 4.50 4.25

SCREWS.

Bench.
Iron....40%
Wood, white maple..per doz..$3 60
Hand—Wood....20%
Hand Rail....70&10%
Jack....75&5%
Lag or Coach. Gimlet Point..70&10%
Saw—Centennial.
Nos. 1 2 3 4
Per doz.... 22c 25c 32c 35c
Wood.
F. H. Bright Steel....90&10%
R. H. Blued Steel ....85&10%
F. H. Jap'd Steel....80&15%
F. H. Brass ....85&10%
R. H. Brass....80&15%
R. H. Nickel Plated....75&10%

SCYTHES.

Clipper, grain....per doz..$8 75
Dutchman, grass .... " 5 50
Golden Clipper, grass. " 5 25
U. S. A., grass.... " 6 50

SETS.

Nail.
Round, common....per doz..$0 33
Square " .... " 42
Octagon " .... " 33
Square, Buck Bros.. " 1 25
Cup Point, knurled, pr doz. 70c@90c
Rivet.
Farmers'....per doz..$1 45
Tinners'....50&10%
Saw.
Aiken's Pattern....per doz..$3 50
Common Lever.... " 1 20
Disston's Monarch.... " 6 50
" X Cut.... " 11 75
German.... " 1 35
Morrill's Old Style.... " 5 00
" Pattern.... " 4 50
Leach's.... " 4 80
Nash's Hand.... " 4 00
" X Cut.... " 5 50
Stillman's Lever.... " 1 30
" X Cut.... " 2 50

SHARPENERS—SKATE.

Diamond.... per doz..$1 60

SHAVES—SPOKE.

Iron....per doz..$1 15@$2 25
Wood.... " 2 75@ 4 75
Bailey's....50&5%
Goodell's....15%
Stanley's Universal....30&5%

SHEARS.

Pruning.
Buckeye, No. 1....per doz. $6 50
" No. 2.... " 8 50
California Pat., 9 in.. " 4 25
" 10 in.. " 5 00
Draw Cut, No. 3.... " 15 50
" No. 4.... " 18 50
Henry's Pat. 0 01 14 012
Per doz..$1.90 $2.50 $3.15 $3.50
Star....per doz..$4 75
Sheep—No. BBA.
6 in. 6½ in. 7 in.
Reg. Grip..$11.00 $11.35 $12.00 doz.
Nar. Grip... 11.20 11.00 12.15
Tinners'—See Snips.

SHEAVES—SLIDING DOOR.

In. 3 4 5
Common..Per set..$0.34 $0.42 $0.68
Hatfield's. " .. .75 1.00 1.60

SHELLERS—CORN.

Union ....per doz..$8 00

SHOT—See Ammunition.

SHOVELS AND SPADES.

Railroad, Etc.
Gold Ribbard's....per doz..$11 00
C. H. Conovers's.... " .. 10 00
Beckwith's.... " .. 10 00
Hickory.... " .. 9 00
Greenleaf's.... " .. 7 75
Columbus.... " .. 7 50
Ames' new list....Discount 10%
Coal.
No. 2 Ajax....per doz..$8 75
No. 2 Bear.... " .. 5 25
Ames' new list....Discount 10%

SIEVES.

Champion....per doz. $1.00
Hunter's Genuine.... " 1.20
" Imitation.... " 1.00
Tin Rim 16 mesh plain wire" 1.35
Wood " 16 mesh plain wire" .85

SINKS.

Cast Iron.
Painted....50&10&5%
Enameled, White....60&10&5%
Wrought Steel.
New Era....50%

SLEDGES—See Hammers.

SNAPS—HARNESS.

Champion....65%
German Pattern....20&5%
Judd's Pattern....60&10%@70%

SNATHS.

Double Ring, Bush .. per doz..$6 50
Patent Loop .... " .. 7 00
" " Brass.... " .. 6 25

SNIPS—TINNERS'.

Hernisch's....40&5%
National.... 40&5%
P. S. & W. Co.'s....25&5%

SOLDER.

See Metals, Column 1.

SPRINGS—DOOR.

Perfect. Nos. 1 2 3 4
Per doz.... 35c 40c 45c 50c
Reliance, Light $1.40. Heavy $2.20 doz.
Star.... " .90. " 1.30 "
Torrey's....per doz..$1 35
Warner's....per doz..68c@$1 35

SQUARES.

Steel and Iron....70&5%
(Add for Bluing, $2.50 per doz., net.)
Mitre—Stanley's No. 12....40%
Try.
Stanley's No. 20, new list....40&5%
" Nos. 12 and 14....40%
Try and Bevel—Stanley's....40&5%
Try and Miter.
Fox's.... per doz..$7 25
Winterbottom's....50%

SQUEEZERS—LEMON.

Common Wood....per doz..$0 72
Porcelain Lined, wood. " .. 1 30
Boss, tinned iron.... " .. 80
Pearl, nickel plated.... " .. 1 30
Star " .... " .. 1 60
Little Giant, tin'd iron " .. 4 25
King.... " .. 2 40
Drum.... " .. 4 25

STAPLES.

Blind—Barbed....per lb. 9½@10c
Butter Tub.... " 8@8½c
Fence, less than carload.
Polished....per 100 lb. $2 40
Galvanized.... " 2 80
Netting—Galvanized....per keg 3 60
Wrought.
Wrought Staples, Hasps and Staples, Hasps, Hooks and Staples, and Hooks and Staples....85&10%
Extra heavy....80%

STEELYARDS.

Discount 25%

STONES.

Axe.
Hindostan....per lb. 5¾@7c
More Grit.... " 9½c
Washita.... " 16½c
Emery....60%@60&5%
Oil—Unmounted.
Arkansas Hard....per lb. $2 00
Arkansas Soft.... " 1 15
Hindostan.... " 6¼@6¾
Lily White.... " 43c
Queer Creek.... " 14¼c
Ouachita.... " 38c
Washita.... " 25c
Scythe.
Black Diamond....per gro. $7 75
Clear Grit.... " 3 90
Gem Corundum.... " 7 50
Green Mountain.... " 4 20
La Moille.... " 7 00
Pikes Gen. No. 1, Ind. Pond., per gro.... 4 75
White Mountain....per gro. 6 50
Willoughby Lake.... " 6 25
Red End.... " 3 15

STOPS—BENCH.

Hotchkiss'....per doz. $3 60
Morrill's No. 1.... " 5 75

STOPPERS—FLUE.

Common....per doz. 42c
Crown.... " 48c
Gem, flat, painted.... " 72c
Gem, cor'd, decorated.... " 68c
Kirch's.... " $1 20
Peerless.... " 72c
Skinner's Common Sense " 95c

STRAPS.

Scoop....per doz. prs. $1 80
Skate.... " " 60@70c

STRETCHERS.

Carpet.
Bullard's....per doz. $3 90
Excelsior.... " 5 50
Malleable Iron.... " 65
Perfection.... " 6 00
Wire.
N. S. Elwood's....per doz. $5 00
O. S. Elwood's.... " 5 25
Little Giant.... " 4 75
Star Lever.... " 6 25
Star Tackle Block.... " 9 25
Warner's.... " 6 25

SWEEPERS.

Carpet—Bissel's.
Standard....per doz. $21 00
Grand Rapids Jap'd. " 23 00
Grand Rapids Plated " 25 00
Baby.... " 2 10
Little Jewel.... " 6 25
Misses'.... " 9 75
Lawn—Finley....10%

SWIVELS.

Malleable Iron....per lb. 6½c
Wrought Steel....per gro. $4 50

TACKS.

American Cut....85&20%
American Wire.... 85&25&10%
Bill Posters' Cut....90&40%
Blued Carpet....90&15%
Tinned Carpet....90&15%
Gimp....90&30&10%
Upholsters' Cut....90&40&5%
Upholsters' Wire....90&25%
Double Pointed....90&20%
Copper....per lb. 20c
Canvas Nails....75&5%
Clout Nails....75&10&5%
Hungarian Nails....80&5%

TAPES—MEASURING.

Asses' Skin....40&5%
Bend Leather....20%
Chesterman's....25%
Patent Leather....20%
Lufkin's....30%
Rival Steel....40%
Pocket....per doz. $2 00@$3 50

TENTS AND PAULINS.

Wall Tents....50&20&10%
Wedge Tents....50&10&5
Paulins....50&10&5%
Wagon Covers....50&10&5%

THERMOMETERS.

Tin Case....per doz.. 95c@$1 25
Wood Back.... " $1 75@ 9 00
Glass.... " 15 50

TIES.

Bale.
Single Loop....80&10&5%
All other kinds....65&10%
Cow—See "Chains."

TONGS.

Crimping—Packham's...per pair 50c
Gutter—P. S. & W. Co.'s....15&10%
Pipe—Brown's....50%
Roofing—P. S. & W. Co.'s....15&10%

TOOLS—SAW.

Atkin's Dexter....per doz. $4 25
Atkin's Excelsior.... " 6 25
Disston's Universal....40%
McDonald's....33⅓%
Simond's Crescent....per doz. $10.00

TRAPS.

Game.
Hawley & Norton....70%
Newh use....50%
New Victor....80%
Mole—Reddicks....per doz. $5 75
Mouse and Rat.
Wood Choker....per hole 10c
Tin Choker.... " 11c
Delusion....per doz. 90c
Out-o'-Sight, Mouse.... " 65c
Out-o'-Sight, Rat.... " $1 30
Imitation Sight, Rat.... " 80c
Marty Rat.... " $6 75
Marty Rat, Imitation.... " 3 75
Marty Mouse.... " 3 15
Marty Mouse, Imitation " 2 10
E-Z-Ketch, Mouse.... " 42c
E-Z-Ketch, Rat.... " 90c
French Automatic.... each $3 60
Fly.
Balloon....per doz. $1 25
Harper's.... " 1 35

TROUGH—EAVE.

Eastern....75&10&5%
Central....75&10&2½%
South Western....70&10&5%
Missouri River....75&10&2½%
Southern....70&10&7½%

TROWELS.

Brick.
Standard....30%
Brade's....10&7½%
Disston's....30%
Rose's....25%
Plasterers'.
Standard....33⅓%
Disston's....30%
W. & McP....25%

TRUCKS.

Bags....each $1 60
Handy.... " 1 35
Warehouse....60&5%

TUBS—WASH.

No. 3 2 1 large Ex.
Standard, per doz. $5.25 6.25 7.25 9.75
Dowel.... " 5.60 6.60 7.50 10.00
Cedar.... " 6.50 7.50 8.25
Indurated. " 7.20 7.95 9.45 11.70
Galvanized.
No. 1 2 3
Per doz....$5.75 6.25 7.00

VISES.

Bonney's....30%
Cheney's....20%
Parker's Oval Slide....50@50&10%
Parker's Parallel....15@20%
Parker's Victor....10%
Parker's Combination....5 &10%
Solid Box....50%
Adam's Mechanics'....each $2 50

WARE.

Cast-Iron Hollow.
Ground....50&10&5%
Unground....60&5%
Extra Finished....40&10&5%
White Enameled....40&10&5%
Muslin Kettles....65&10%
Enameled.
Adamant, one coat, 70&10% @75&10%
The manufacturers divide this ware into two classes, which take different discounts, noted above.
Crysolite, three coat....40&5%

WASHERS.

Leather. In. ⅜ 1 1⅛ 1¼ 1½
Nut, per C....16c 17c 19c 25c 32c
Collar, per C...35c 40c 40c 43c
Wrough Iron.
In. ¼ 5-16 ⅜ ½ ⅝ ¾ to 1
Per lb. 8¼c 7¼c 6¼c 4½c 4¼c 4c
Wrought Steel.
In. ¼ 5-16 ⅜ ½ ⅝ ¾ to 1
Per lb. 9c 8c 7c 5¼c 5c 4¾c

WEDGES.

Ax....per doz....30c
Galling....per lb..10¾c
Saw.... " .. 8¾c
Wood Choppers.
Lake Superior and Oregon, Pat....per lb.. 9¾c
Reg. Pattern, Steel... " .. 4 c
Truckee " .... " .. 4¼c

WEIGHTS.

Hitching....per lb .2½c
Sash—F.O.B. Chicago..pr ton..$25.00

WHEEL BARROWS.

Common Railroad....per doz..$12 75
Heavy " .... " .. 19 50
Railroad, ball bearing " .. 19 00
Santiago Steel Tray.. " .. 26 50
No. 04 Steel Dirt .... " .. 51 00
No. 04½ " " .... " .. 55 00

WHEELS.

Emery and Corundum....75&5%
Well. In. 8 10 12 14
Per doz.... $1.90 $2.20 $3.00 $5.50

WIRE.

Barbed. Painted. Galv'd.
Carloads...pr 100 lbs..$2.75 $3.05
Less than car " .. 2.80 3.10
Brass.
In coils.... 20%
In 1 lb. spools, new list....50&10%
Broom—Tinned.... 60&10&10&10%
Cable—Same price as Barbed Wire.
Copper.
In coils....20&10%33⅓%
In 1 lb. spools, new list....50&10%
Fence—Smooth.
Nos. 6 to 9, Annealed, pr 100 lbs. $2.20
Nos. 6 to 9, Galv'd.... " 2.60
Hair—New list....50&10%
Market.
Bright, full bdles....70&10%
Bright, broken bdles....70&5%
Coppered, full bdles....70%
Coppered, broken bdles....65&10%
Tinned, full bdles....70&5%
Tinned, broken bdles....65&10%
Picture.
In coils....80%@80&10%
In 5 lb. spools....per lb..26c

WRENCHES.

Acme Standard....60%
Alligator....65&5%
Always Ready....40&10&5%
Bemis & Call....40%
Coe's Standard....40&10%
Girard's Agricultural....60&5%
P. S. & W. Co.'s Agricultural....75%
" " Knife H'dle..50&5%
Wescott's "S"....33⅓%
Malleable....per lb..6c
Stillson Pipe....60&5%
Trimo " 60%

WRINGERS.

Clothes.
Nos. 22&110, Guarantee, pr doz. $28 00
No. C 350, Novelty.... " 22 50
No. 3, Empress.... " 25 50
No. 150, Sunshine.... " 18 00
No. 130, Mendota.... " 18 00
No. 12, Success.... " 16 00
No. C 500, Royal.... " 38 00
Blue Bell Ball Bear'g. " 25 00

Wants and Sales.

For yearly subscribers to THE AMERICAN ARTISAN will be inserted under this head advertisements of six lines WITHOUT CHARGE, for employers wishing to secure employes, persons seeking situations, parties desiring to purchase a business, businesses for sale, partners wanted, to exchange, etc. Those who respond to these announcements will please mention that they read the advertisement in THE AMERICAN ARTISAN.

BUSINESS CHANCES.

PATENTS HUBERT E. PECK, 623 F St., N. W., Washington, D. C. Consulting Expert in Patent Causes, U. S. and Foreign Patents. Send for leaflet on "Rejected Patent Applications." Honest work but no "Something for Nothing" offers.

Wanted—To buy a tinshop in northern Wisconsin, or if anyone knows of good location where a shop could be started please communicate with P. E. Jensen, 605 2d avenue, Appleton, Wis. 4

For Sale—A clean stock of hardware, stoves, tinners' tools, etc. Invoice at about $2,000. Located 8 miles from heart of city; one of the best suburbs. A good chance for man of small capital. Address Suburban, care of The American Artisan, 69 Dearborn street, Chicago, Ill. 4

For Sale or Exchange—A profitable hardware business, being one of three stocks in a growing county seat town of 4,000 in southern Iowa. Stock will invoice about $7,000 to $8,000. Poor health of one member of firm reason for selling. Address F 200, care of The American Artisan, 69 Dearborn street, Chicago, Ill. 4

Wanted to Buy—Stock of hardware in a small town in Wisconsin, Minnesota or Dakota; prefer a village where a bank could be started. Address Lock Box 3, Kimball, Minn. 3

Wanted—I am a tinner and want a partner in a good paying hardware and tin shop. Have up-to-date stock 60 miles northwest of Chicago; population, 900. Address Box XX, The American Artisan, 69 Dearborn street, Chicago, Ill. 3

For Sale—For cash or cashable paper. Only hardware and lumber business in small Indiana town. Residence, store and lumber shed. Entire invoice, about $5,000. A neat, clean and perfectly safe business. Will bear closest investigation. Address W. R., care The American Artisan, 69 Dearborn street, Chicago, Ill. 3

Located in best farming County in the State, and FOR SALE. A clean stock of Hardware and Groceries. Write for particulars to B. C. Smutz, Mendon, Mo. 2

For Sale.—A complete set of tinners' tools and stock in a town of 1,000. Located in the rice and oil fields of southwest Louisiana. Full particulars given on application. Rare chance for a hustler. Don't write unless you mean business. P. E. D. Underwood, Welsh, La. 2

For Sale—A good, clean stock stoves, tinware and house furnishing store, roofing, spouting, plumbing, etc.; will invoice about $5,000; in a central Ohio town of 10,000, county seat, three railroads, good schools, natural gas, electric light, street cars, water works, sewer etc; in an old location; good stand. Will give a good deal to right party. Address Ohio care The American Artisan, 69 Dearborn street, Chicago, Ill. 2

Wanted—A stock of hardware or hardware and furniture, in exchange for good land that is raising in value. Give size of stock. Box 706, Garner Iowa. 1

For Sale—A good clean stock of hardware, fixtures and tinner's tools; all told invoicing from $3,000 to $3,500; located in the best section of north central Iowa; a live town of 1,000 population; good schools, churches, etc.; has water works, gas light plant; best of reasons for selling. Address A. E. Glines, Rockwell, Ia. 1

TINNERS' TOOLS.

For Sale—Set of piping tools, including dies, die stocks, tape, wrenches and cutters. For list and prices address Edw. Dow, Box 257, Laconia, N. H. 4

Wanted—To exchange 20-in. Peck, Stow & Wilcox square shears for 30-in. folder or sickle and shears. T. J. Evert, 211 N. Clark st., Chicago, Ill. 3

For Sale—Dirt cheap, 2 sets tinner's tools and machines for sale, one set new, both in good shape. David Curtis, Lone Tree, Iowa. 1

HELP WANTED.

Wanted—A good tinner and furnace man at once; steady job, good wages. C. J. Stark, Ortonville, Minn.

Wanted—Good tinner for in and outside work; steady work all year round for good man. State wages. Address Fred Thomas, Menomonee Falls, Wisconsin.

Wanted—A good all-around tinner and plumber. Permanent position to right man. Write at once to John Zimmerer & Co., Seward, Neb. 4

Wanted—A tinner with a complete set of tools wants location for a tinshop. Iowa, Kansas or Nebraska preferred. Address J. A. Jackson, Unionville, Ia. 4

Wanted—A live young man, one that has had some experience of selling stoves, ranges and heaters. Reference required. Address South Erie Iron Works, Erie, Pa. 4

Wanted—Hardware clerk; one who understands stoves and is familiar with tinshop preferred. State salary wanted and give reference. J. B. Sperry, Pt. Huron, Mich. 4

Wanted—A good all-around tinner; one who understands furnace and pipe work. Good job all the year around. German preferred. State wages. J. M. Schmidt & Co., New Glarus, Wis. 4

Wanted—Sober and experienced man for stove and furnace repair work. Permanent job for a good one. E. L. Sommers, 7105 S. Chicago avenue. Take Oakwoods and 71st St. cable on Wabash avenue. 4

Help Wanted—A first-class all-around tinner who understands cornice and furnace work. State wages wanted. Must be sober and give references. Steady job to right man. Sullivan & Charest, Moorhead, Minn.

Wanted—By manufacturer, a salesman on commission, to sell good line of tinware and sheet metal goods in state of Michigan. Address "Box S. H. M.," care of The American Artisan, 69 Dearborn street, Chicago, Ill. 4

Wanted—A first-class hardware man to take charge of a stock of hardware and furniture in a city of 15,000 inhabitants; must be a thorough business man of good habits and furnish the best recommendations. Good salary for the right man. E. C. Minas, Hammond, Ind. 4

Wanted—Tinner. State for whom last worked, how long, how long altogether at trade. Don't need an implement man. Want a tinner. How soon could you come? Wages $2.00 per day. Steady job year round for right kind of man. Address "Right Kind," care The American Artisan, 69 Dearborn st., Chicago, Ill. 4

Wanted—An experienced warm air furnace salesman to travel the states of Ohio, Wisconsin and Illinois, selling on a commission basis the most up-to-date warm air furnaces made. Liberal commission to a suitable person. In answering give references, etc. Address "Box W. F. S." care of The American Artisan, 69 Dearborn street, Chicago, Ill. 4

Wanted—Two first-class tinners at once. McGuire Bros., Rockford, Ill. 3

Wanted—A good all-around tinsmith. Apply to Alfred Martin & Co., 312 and 314 Market st., Rockford, Ill. 3

Help Wanted—One first-class tinsmith; must give references and what wages expected. Hoernel Hardware Co., Racine, Wis. 3

Good tinners can find steady employment by writing me. All indoor work. Address S. Nelson, 335 Jackson st., Topeka, Kas. 3

Wanted—A good tinner; good wages and steady job; no drunks wanted. Reeder Bros., Clinton, Wis. 3

Wanted—At once, good all around tinner. Good wages to right man. Address M. R. O'Neill, Hardware, 67 Broadway, Fargo, N. Dak. 3

Wanted—Young man with two or three years' experience as tinner; steady work and a chance to advance. Address Boyd Bros., Glen Ellyn, Ill. 3

Wanted—At once, a good tinner and all round man, one who understands pump and windmill work. Steady job to right man. J. A. Dunstan, Hollandale, Wis. 3

Wanted—A first-class all-around hardware clerk; must be well recommended as reliable and of good habits. Jno. W. Jochim Hardware Co., Ishpeming, Mich. 3

Wanted—A clerk in a stove store; must understand stove work thoroughly; a German preferred. Address T. U. S., care The American Artisan, 69 Dearborn street, Chicago, Ill. 3

Wanted—A man to conduct cooking exhibitions, one who understands selling malleable steel ranges. Please call or address "Faultless" Manufacturing Co., 617 Austin Ave., Chicago, Ill. 3

Wanted—Salesman covering Wisconsin, Indiana, Iowa, Illinois and Ohio to sell tinware for manufacturer on commission. Address "Y. O.," care of The American Artisan, 69 Dearborn st., Chicago, Ill. 3

Wanted—A good tinner, one who understands furnace work and is capable of clerking in the store when necessary; North Dakota man preferred. Address Hunter Bros., Cando, N. D. Send references. 3

Wanted—Thoroughly competent and experienced superintendent for the manufacture of tin furnace pipes and fitting, including safety pipe and fittings. One who understands planning and handling machinery for this class of work. Address "Boxtho," care of The American Artisan, 69 Dearborn st., Chicago, Ill. 3

Wanted—A good tinner who understands furnace work. Steady employment. R. R. Craig, Wellman, Ia. 2

Wanted.—Young man handy in store and shop. Address "M. L.," care The American Artisan, 69 Dearborn street, Chicago, Ill. 2

Good A-1 cornice-makers wanted at once. Steady work at good wages. Address Mason City Sheet Metal Works, Mason City, Iowa. 2

Wanted—Six first-class copper and sheet iron workers immediately. Apply in person, or write to the Detroit Heating & Lighting Company, Detroit, Mich. 2

Tinner Wanted.—One who understands furnace and plumbing work. Steady job to the right man. Write at once, stating wages and experience. Address Maher & Son, Preston, Ia. 2

Wanted—At once good tinner with some knowledge of plumbing and hot water heating and willing to clerk in store. Steady job to right man the year around. Address giving references. M. R. O'Neill, 67 Broadway, Fargo, N. D. 2

Wanted—Ten first-class tinners, furnace and cornice-makers can get steady work, liberal pay. We've got to have them and have them quick, and will employ any competent man of good character who applies. The Grahl-Peterson Co., 216-218 Main st., Council Bluffs, Ia. 2

One complete set of tinner's machines and tools manufactured by Peck, Stow & W.; also one Buffalo portable forge; one 100 lbs. Hay-Budden wrought anvil; one set Butterfield stock and dies for bicycle work. Write for descriptive list and prices and discounts. Address P. O. Box 496, Aurora, Neb. 2

Tinner Wanted.—A thoroughly good tinner, roofer and galvanized iron worker; young, active, experienced and industrious; strictly temperate, courteous, accommodating and of good character. References required. Steady and permanent employment at good wages for good man. Address Fulton Hardware Co., Portland, Ind. 2

Wanted—At once a first-class, sober and industrious tinner who understands furnace work, to estimate and figure on same, roofing and spouting, and to clerk in store when needed. Good wages, paid every Saturday night, and charge of shop. Steady job to right man. State wages wanted per month and address L. J. Eneboe, Woonsocket, S. D. 2

HELP WANTED.

Wanted—Foreman for gas range department by a large manufacturing concern; sheet metal worker with executive ability to handle men, who is familiar with dies, presses and other tools pertaining to the gas stove business. A man capable to take complete charge of the shop. Someone acquainted with the gas stove business preferred. State age and salary expected. References required. Steady employment to the right man. Address "Gas Range Foreman," care of The American Artisan, 69 Dearborn st., Chicago, Ill. 2

Tinner wanted at once, with two or more years' experience. Steady job, and one not afraid of work. Address H. A. Brouillet, Lansing, Ia. 1

Wanted—An experienced stove blackener and must understand about stove repairs. Must have reference. Wm. Noebling, 399 E. North Ave., Chicago, Ill. 1

Wanted—Traveling salesman for gas fixtures, gas machines, house heaters, etc. Must have mechanical and road experience. Give full particulars. Address Box 49, The American Artisan, Chicago. 1

Wanted, Foreman—A manufacturer of valves, located in the Central West, desires a competent foreman to take charge of brass foundry; references required. Address "Valves," care of The American Artisan, 69 Dearborn st., Chicago, Ill. 1

Wanted—A good tinner, who is quick and can do a good job on inside and outside work. Must be a reliable man. Steady work. State age and wages wanted. In one of the largest South Dakota towns. Address "B. R.," care The American Artisan, 69 Dearborn St. Chicago, Ill. 1

SITUATIONS WANTED.

Situation Wanted—In hardware and implement store by young married man with 16 years' experience. Prefer town of fair size. Good references. Address Lock Box 2, Cisco, Ill. 4

Situation Wanted—15 months' experience in a tinshop. Address John Nesnaell, Mazomanie, Wis. 3

Situation Wanted—A first-class tinner, plumber and steam fitter would like to hear of a good location to start a shop, or would rent a shop in connection with some hardware store. Address Box 383, Hillsboro, Ill. 3

Situation Wanted—A position by a good tinner and furnace man, 9 years' experience, best of references. German-American, fairly well posted in the hardware business, can take full charge of shop. Strictly sober and reliable. A willing and good worker. Address Wm. J. Grummer, Newport, Ark. 3

Situation wanted as tinner, in and outside work; can clerk in hardware store if necessary, having some knowledge in the hardware business, or would put in a tin shop in connection with some hardware firm if satisfactory; am sober and industrious; would like steady position with good firm; am not able to handle farm machinery. Box 22, care of American Artisan, 69 Dearborn st., Chicago, Ill. 2

CHAS. F. HARTMAN,
FOND DU LAC, WIS., writes:

"No hardware dealer or tinsmith should be without The American Artisan."

SPECIAL NOTICES.

For Sale—Chance of a lifetime. Well established and profitable hardware business doing retail and wholesale trade. Stock $12,000 to $13,000; can be reduced in 30 days to $8,000. Located one best towns central N. Y. State. Population 45,000 and increasing; liberal terms can be arranged on purchase; investigation invited. Address "Hardware & Stoves," care of The American Artisan, 69 Dearborn st., Chicago, Ill. 1

FIRST-CLASS
$12,000 stock hardware in town of 4,000 population in southwestern Iowa, to exchange for Iowa land.
E. B. WESTCOTT, Clarinda, Iowa. 915

LEARN SHEET METAL PATTERN CUTTING
We furnish a complete course consisting of 100 plates 13x18 inches. Each student receives special instructions. No arithmetic or geometry to learn. We start you in actual work at once. Write for full information and free sample plate.
HOME INDUSTRIAL SCHOOL, Canton, Ohio

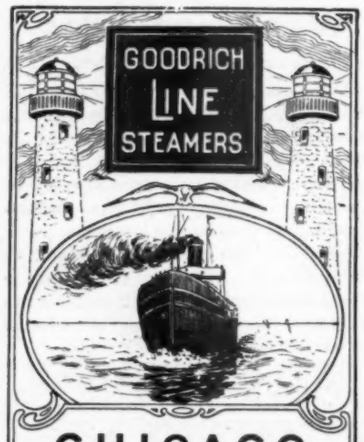
WANTED:

First-class sheet metal worker, whose experience has been such as will make him capable to handle any part of that class of work which naturally comes under the head of tin department in large manufacturing concern. Address "Tin," care The American Artisan and Hardware Record, 69 Dearborn St., Chicago, Ill. 4

TO TELL THE TRUTH
We are in need of a second hand 30 inch or 36 inch Cornice Brake.
Independent Register Co.
CLEVELAND, O.

Don't Mourn
because your competitor is getting more European business than you are as I can accept the agency for a few lines of American manufacture in British Isles and Continental Europe. Will give prompt attention to same. Can furnish references.
MONTAGUE COHEN
59 Paradise St., LIVERPOOL, ENG.

J. K. SCHICK, Fairbury, Ill., writes:
"Your paper has furnished me with more than ten times the value of its cost."



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To MILWAUKEE
GRAND RAPIDS
MUSKEGON and
GRAND HAVEN
City Ticket Office 103 Adams St.
Docks Foot of Michigan Avenue

The "Weber Junior" Pumper

Can also be used for other power purposes. Is all complete, ready to attach to pump. Equals 30 men pumping water. Uses but little gasoline. Is shipped crated completely erected, all connections made. Easy to start, any one can operate it. Every one guaranteed. Other sizes up to 50 H. P. Send for catalog. Weber Gas & Gasoline Engine Co. P. O. Box 1115B Kansas City, Mo.

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DESIGNERS
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149 Jefferson Ave. Detroit Mich.
is worth Advertising well.

Orlan Clyde Cullen
COUNSELOR-AT-LAW U. S. SUPREME COURT
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U. S. and Foreign Patents
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700 Seventh St., N. W., WASHINGTON, D. C.

THE MAN WHO SELLS STOVES
should lose no time in becoming acquainted with
DIXON'S GRAPHITE CEMENT
It is the most effective article in existence for the repairing of firebrick in stoves and furnaces. We will send you sample and prices free for the asking
Joseph Dixon Crucible Co., Jersey City, N. J.

Ullery & Jones, Gibson City, Ill., write:
"Please take out our ad for Tinner and Plumber, as we now have a good man. We find that your paper reaches the craft all right."

INDEPENDENT REGISTER COMPANY
MANUFACTURERS OF
REGISTERS, VENTILATORS,
STOVE PIPE RADIATORS
... AND ...
HARDWARE SPECIALTIES

E. C. FOX, MANAGER

154-156-158 CHAMPLAIN ST.
CLEVELAND, O.

July 21st, 1902.

Mr. Daniel Stern,

Chicago, Ill.

Dear Sir;-

We are pleased to continue our space in the " The Artisan." The fact that our advertisement has appeared in every issue of your journal, since we started in business, should be good evidence that it is profitable to us.

Yours truly,

Independent Register Co.

E. C. Fox Mgr.

MILWAUKEE CORRUGATING CO.

MILWAUKEE, WIS.

MANUFACTURERS OF

ROOFING	CORNICES	CEILINGS
Eaves Trough	Steel Roofing	
Cond. Pipe	(all kinds)	
(Rd. and Sq.)	Corrugated Iron	
Elbows	Curved Iron	
Hangers	Crimped Iron	
Cor. Cut-Offs	Brick Siding	
Pat. 11-14-99	Rock Face	
Cond. Hooks	Beaded Iron	
Trimmings	Metal Shingles	

TINPLATE—GALVANIZED IRON—SOLDER.

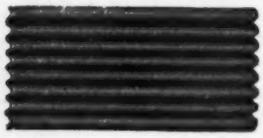
WE ARE THE ONLY AUTHORIZED MANUFACTURERS OF CORRUGATED CUT-OFFS.—(Beware of Infringement.)

GARRY IRON & STEEL ROOFING COMPANY

CORRUGATED

ROOFING SIDING & CEILING

CLEVELAND OHIO.



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Steel Roofing, Corrugated Iron, Etc.

We are large manufacturers of these goods and can save you money.

SYKES STEEL ROOFING CO. Chicago, Ill., and Niles, Ohio

THE NEW HOTEL AT FRENCH LICK SPRINGS

IN THE INDIANA HIGHLANDS

Two Trains Daily, via Monon Route. City Ticket Office, 232 Clark St.

$3.00 SAVED

TO ALL POINTS EAST AND WEST VIA THE D&B LINE.

"Just Two Boats" BETWEEN DETROIT & BUFFALO

DETROIT & BUFFALO STEAMBOAT CO.

COMMENCING JUNE 10TH

Improved Daily Express Service (14 hours) between

DETROIT AND BUFFALO

Leave DETROIT Daily - - 4. P. M.
Arrive at BUFFALO - - - 8.00 A. M.

Connections with all railroads for points EAST.

Leave BUFFALO Daily - - 5.30 P. M.
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Connecting with Earliest trains for all points in MICHIGAN and the WEST, also with B. & C. LINE of steamers for all Great Lake Summer Resorts. Send 3c. for illustrated pamphlets and rates.

Rate between Detroit and Buffalo $2.50 one way, $6.50 round trip. Berths $1.00, $1.50; Staterooms $2.50 each direction.

IF your railway agent will not sell you a through ticket, please buy a local ticket to Buffalo or Detroit, and pay your transfer charges from depot to wharf. By doing this we will save you $3.00 to any point East or West.

A. A. SCHANTZ, G. P. A., Detroit, Mich.

WILSON & LESLIE, SOUTH BEND, IND.,

WRITE:

"We are surprised at the great circulation of THE AMERICAN ARTISAN as we have received letters from a great many different states."

STEEL ROOFING

We are also manufacturers of
Eaves Trough
Conductor Pipe
Elbows Mitres
Hangers Cut Offs

All kinds. All gauges. Painted and Galvanized. Lowest Prices. Prompt shipments guaranteed. Send us your orders.

LaCrosse Steel Roofing and Corrugating Co., - LaCrosse, Wis.

HEADQUARTERS FOR
GALVANIZED IRON CORNICES,
WINDOW CAPS, FINIALS, ETC:
METALLIC AWNINGS,
DAIRY SUPPLIES, TANKS, ETC.
BEST BOTTOM MILK CAN
HOOP MADE.

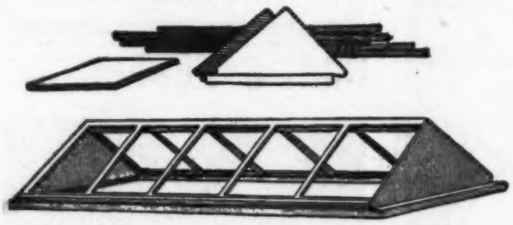
Special Attention given to Work on all kinds of Sheet Metal.

B. T. Wood, 121 Broadway, Berlin, Wis.

SKYLIGHTS
that are...
Waterproof

Write for Catalogue and Prices.

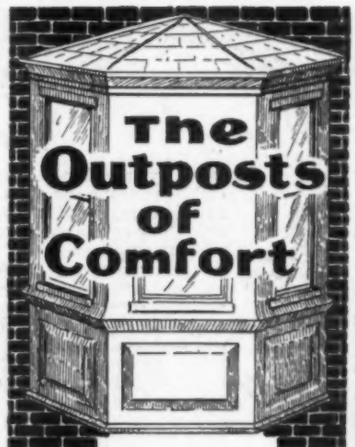
A METAL SKYLIGHT



THAT can be shipped *knocked down* and takes 4th class freight rate. Made any size, with plain ends or with louvre ventilators in ends. Guaranteed strong and storm proof. Can be set up by anybody without tools.

Send for description and prices.

GALESBURG CORNICE WORKS, Galesburg, Ill.



M F Roofing Tin insures a sound, leak-proof covering to the main roof and the little roofs over cornices and windows. The roofs are the outposts of house comfort—a leak at any of these points is fatal to the house and its furnishings. The sure way to comfort is to contract with the roofer to put on

M F Roofing Tin

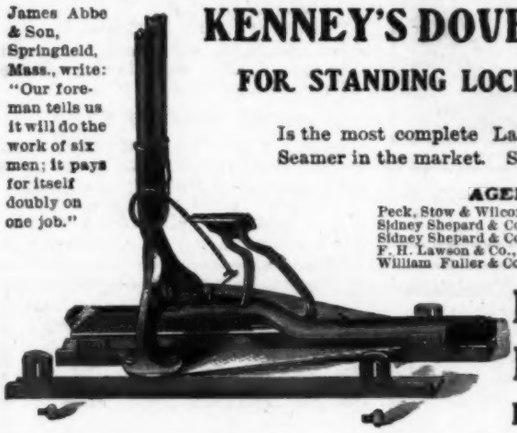
—the best of all roofing; 50 years the world's standard for tin manufacture. It has the heaviest coating of pure tin and new lead, and will not rust. If you would know more of M F roofing

TRADE MF MARK

write to W. C. CROSENEYER, Agent, Carnegie Building, Pittsburg, for illustrated book on roofing.

AMERICAN TIN PLATE COMPANY, NEW YORK.

James Abbe & Son, Springfield, Mass., write: "Our foreman tells us it will do the work of six men; it pays for itself doubly on one job."



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FOR STANDING LOCK TIN ROOFING

Is the most complete Labor-Saving Double Seamer in the market. Send for catalogue.

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Sidney Shepard & Co.,	Chicago, Ill.
Sidney Shepard & Co.,	Buffalo, N. Y.
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HARTFORD, CONN.

W. J. BINKLEY, BELLEVILLE, KAN.
WRITES:

"I gain much valuable information from THE AMERICAN ARTISAN and would not think of running a tinshop without it."

SEND TO THE

Willis Manufacturing Co.,

Galesburg, Ill.,

For a copy of their
NEW CATALOGUE (just issued) OF
CORNICE ORNAMENTS
AND STATUARY.

Also send in
Architects' Details for Estimates.

Genuine "Bangor Union"
Mammoth Vein Sea Green,
Purple and Variegated

Roofing Slate Are Manufactured By

The AULD & CONGER CO.

CLEVELAND, O.

Prices on any grade of Slate furnished upon Application.

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saved by handling the best metal ceilings. Our metal ceilings are the cheapest, because it takes but one-half the time to erect them as those of other manufacturers. The special features of **"Canton"** Ceilings are: tight fitting joints, straight and regular alignment, plates are resheared on all sides, beautiful patterns

"CANTON" METAL CANTON CEILINGS **CEILINGS.**

large variety of designs and the embossing is deep and bold. Made in classified designs. Send us a plan of your building and let us make you an estimate of your requirements, Detailed drawings showing application mailed with every order.

If interested send for our new Catalog F.

The Canton Steel Roofing Co.

CANTON, OHIO

New York Office, 157 W. 23d St.

CEILINGS

GRAY'S PERFECT...

For Hip Skylight.
" Gable Skylight.
" Single Pitch Skylight.

Also chart showing lengths to cut bars. Made on Heavy Blue Print Paper

PRICE, PREPAID, $3.50

WRITE FOR ELBOW AND SKYLIGHT PATTERN CIRCULARS AND SAMPLE BLUE PRINTS.

C. L. GRAY,

840 N. Cedar St., Galesburg, Ill.

Jay Commons, Aurora, Mo., writes—"Please take out my advertisement. It has been entirely satisfactory."

WHEN THE NAME **MERCHANT**

Is stamped on a sheet of Roofing Tin, it means the very best of everything is there—

IN THE PLATE

Not in the Advertisement

MERCHANT & CO., Inc.

PHILADELPHIA NEW YORK BROOKLYN BALTIMORE CHICAGO

THE DIFFERENCE.

There's a big difference between the old time lant-horn (or lantern) of King Alfred's time, and the electric light of to-day.

There's almost as big a difference between the first metal ceilings and Berger's Classik.

The first metal ceilings were plain, unornamented sheets, used mainly as protection against fire.

Next, corrugated and beaded material was used; then, ornamental designs, simple at first, but later on more elaborate.

No attempt, however, was made to produce a complete series of artistic classified designs until the production of Berger's Classik.

Berger's "Classik" Ceilings

Are the most artistic metal ceilings ever placed upon the market. They are also the best stamped and have the greatest variety of patterns to choose from.

Wide-awake dealers should avail themselves of the benefits of handling this high art line.

Write for handsome catalogue and full particulars.

THE BERGER MFG. COMPANY,
CANTON, OHIO.

New York Office: 210 E. 23rd St., New York, N. Y.
Philadelphia Office: 1218 Filbert St., Philadelphia, Pa.
New England Branch: 176 Federal St., Boston, Mass.
Western Branch: 19-21 S. Main St., St. Louis, Mo.

Specialties: Ceiling, Roofing, Siding, Eave Trough, Conductor Hangers, Etc., Etc.

ROOFING PLATES...

"Balm's Old Style" Heavily Mottled. Dull Oil Finish. Magnificent.

This is a handsome plate in appearance. It has a dull oil finish and is beautifully mottled. The plate carries 35 pounds of coating to the box, is stamped and resquared, and made by the Palm Oil Process. A meritorious article. We carry a large stock, and can make immediate shipment.

ILLINOIS ROOFING & SUPPLY CO.,
23 LAKE STREET, CHICAGO

"EASTLAKE" METALLIC
SHINGLES AND TILE
ABSOLUTELY THE BEST ROOFING

W. J. BURTON & CO.
"THE QUICK SHIPPERS"
160-166 W. Larned St.
DETROIT, MICH.

Art Metal Ceilings

For Interior Decorations.

Write for Catalogue and Prices.

We have 40 different designs to select from. Our Stamped Ceilings are the most perfectly embossed ceilings on the market.

Estimates Furnished on Special Work.

SPECIALTIES:
Steel Ceiling, Zinc and Copper Ornaments, Statuary in Bronze, Zinc and Copper, Crestings, Finials, Capitals, Galvanized Steel Horses for Merry-Go-Rounds, Copper Plated Ceilings in Antique Finish, etc., etc.

Friedley & Voshardt
194-202 Mather St., CHICAGO, ILL.

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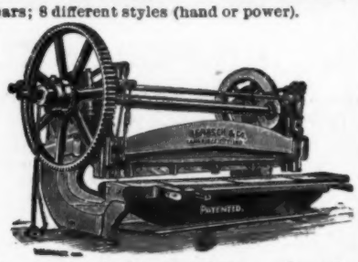

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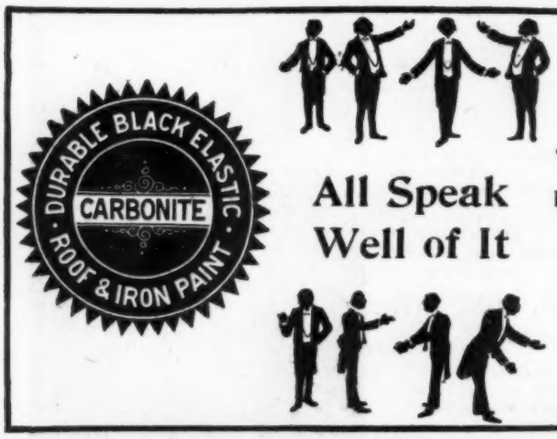

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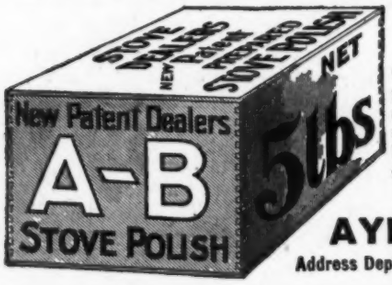

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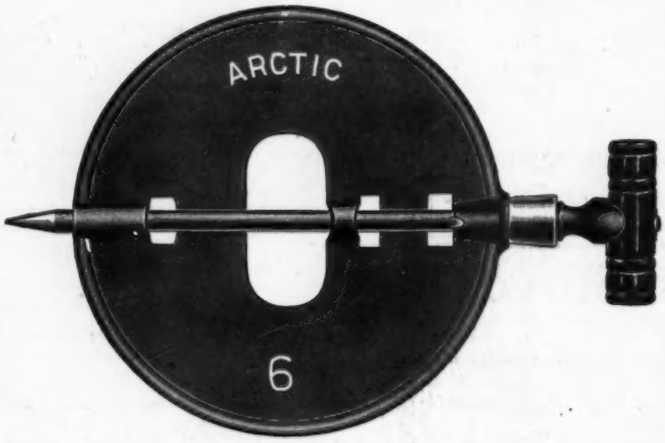

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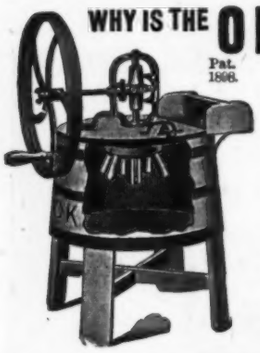

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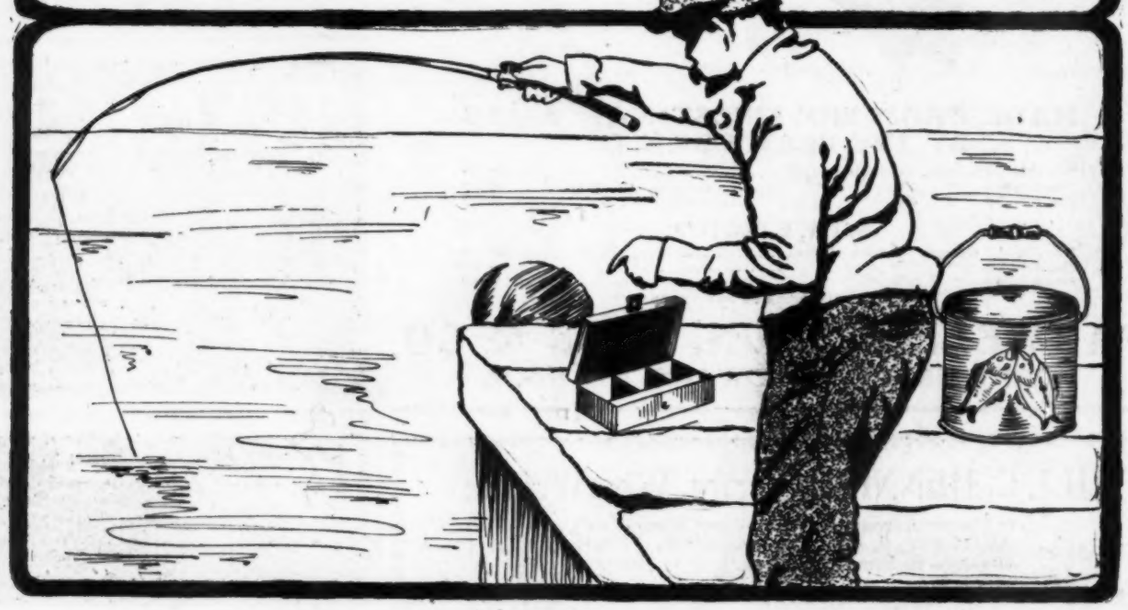

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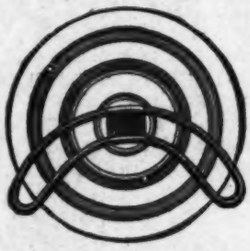

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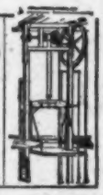

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